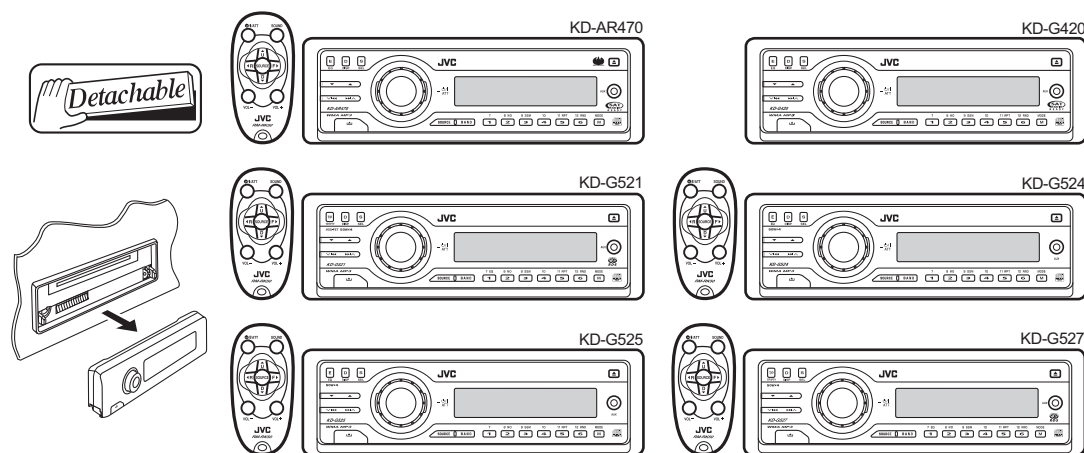


JVC

SERVICE MANUAL

CD RECEIVER

KD-AR470, KD-G420, KD-G521, KD-G524, KD-G525, KD-G527



**WMA
MP3**

**SAT
RADIO
READY**

**COMPACT
disc
DIGITAL AUDIO
TEXT**

R-D-S

**Amplifier Power Standard
CEA-2006 Compliant**

KD-AR470, KD-G420

Area suffix

J ----- Northern America

KD-G521

Area suffix

E ----- Southern Europe

EX ----- Northern Europe

EY ----- Eastern Europe

EU ----- Turkey

KD-G524

Area suffix

UI ----- India

KD-G525

Area suffix

UT ----- Taiwan

UH ----- Thailand

UN ----- Indonesia

U ----- Other Areas

KD-G527

Area suffix

EE ----- Russian Federation

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

TABLE OF CONTENTS

1	PRECAUTIONS	1-3
2	SPECIFIC SERVICE INSTRUCTIONS	1-6
3	DISASSEMBLY	1-7
4	ADJUSTMENT	1-12
5	TROUBLESHOOTING	1-14

SPECIFICATION

AUDIO AMPLIFIER SECTION			
Power Output	KD-AR470, KD-G420		20 W RMS × 4 Channels at 4 Ω and [$\leq$ or $\geq$] 1% THD+N
Maximum Power Output	KD-G521, KD-G524, KD-G525, KD-G527	Front	50 W per channel
		Rear	50 W per channel
Continuous Power Output (RMS)	KD-G521, KD-G524, KD-G525, KD-G527	Front	19 W per channel into 4 Ω, 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.
		Rear	19 W per channel into 4 Ω, 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.
Signal to Noise Ratio	KD-AR470, KD-G420		80 dBA (reference: 1 W into 4 Ω)
	KD-G521, KD-G524, KD-G525, KD-G527		70 dB
Load Impedance			4 Ω (4 Ω to 8 Ω allowance)
Tone Control Range	Bass		±10 dB at 100 Hz
	Treble		±10 dB at 10 kHz
Frequency Response			40 Hz to 20 000 Hz
Line-Out Level/Impedance	KD-AR470		4.0 V/20 kΩ load (full scale)
	KD-G420, KD-G521, KD-G524, KD-G525, KD-G527		2.5 V/20 kΩ load (full scale)
Output Impedance			1 kΩ
Other Terminals			CD changer, Steering wheel remote input (Only KD-G521), AUX (auxiliary) input jack
TUNER SECTION			
Frequency Range	FM (KD-AR470, KD-G420)		87.5 MHz to 107.9 MHz (with channel interval set to 100 kHz or 200 kHz) 87.5 MHz to 108.0 MHz (with channel interval set to 50 kHz)
	FM (KD-G521, KD-G524, KD-G525)		87.5 MHz to 108.0 MHz
	FM1/FM2 (KD-G527)		87.5 MHz to 108.0 MHz
	FM3 (KD-G527)		65.00 MHz to 74.00 MHz
	AM (KD-AR470, KD-G420)		530 kHz to 1 710 kHz (with channel interval set to 10 kHz) 531 kHz to 1 602 kHz (with channel interval set to 9 kHz)
	AM (KD-G521, KD-G527)		(MW) 522 kHz to 1 620 kHz (LW) 144 kHz to 279 kHz
	AM (KD-G524, KD-G525)		531 kHz to 1 602 kHz
FM Tuner	Usable Sensitivity		11.3 dBf (1.0 μV/75 Ω)
	50 dB Quieting Sensitivity		16.3 dBf (1.8 μV/75 Ω)
	Alternate Channel Selectivity (400 kHz)		65 dB
	Frequency Response		40 Hz to 15 000 Hz
	Stereo Separation		35 dB
	Capture Ratio		1.5 dB
AM Tuner	KD-AR470, KD-G420, KD-G524, KD-G525	Sensitivity	20 μV
		Selectivity	35 dB
MW Tuner	KD-G521, KD-G527	Sensitivity	20 μV
		Selectivity	35 dB
LW Tuner	KD-G521, KD-G527	Sensitivity	50 μV
CD PLAYER SECTION			
Type			Compact disc player
Signal Detection System			Non-contact optical pickup (semiconductor laser)
Number of Channels			2 channels (stereo)
Frequency Response			5 Hz to 20 000 Hz
Dynamic Range			96 dB
Signal-to-Noise Ratio			98 dB
Wow and Flutter			Less than measurable limit
MP3 Decoding Format			MPEG1/2 Audio Layer 3 Max. Bit Rate: 320 kbps
WMA (Windows Media® Audio) Decoding Format			Max. Bit Rate: 192 kbps
GENERAL			
Power Requirement	Operating Voltage		DC 14.4 V (11 V to 16 V allowance)
Grounding System			Negative ground
Allowable Operating Temperature			0°C to +40°C (32°F to 104°F)
Dimensions (W × H × D)	Installation Size (approx.)		182 mm × 52 mm × 150 mm (7-3/16" × 2-1/16" × 5-15/16")
	Panel Size (approx.)		188 mm × 58 mm × 11 mm (7-7/16" × 2-5/16" × 7/16")
Mass (approx.)			1.5 kg (3.3 lbs) (excluding accessories)

- Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Design and specifications are subject to change without notice.

SECTION 1

PRECAUTIONS

1.1 Safety Precautions



CAUTION Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.



CAUTION Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

1.2 Preventing static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.2.1 Grounding to prevent damage by static electricity

Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as CD players.

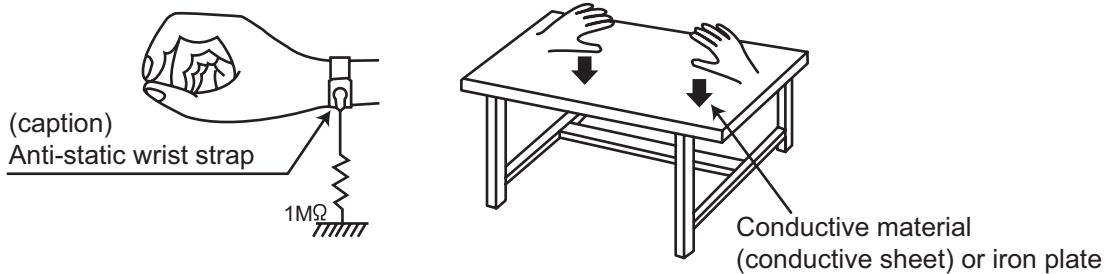
Be careful to use proper grounding in the area where repairs are being performed.

(1) Ground the workbench

Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

(2) Ground yourself

Use an anti-static wrist strap to release any static electricity built up in your body.



(3) Handling the optical pickup

- In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)
- Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

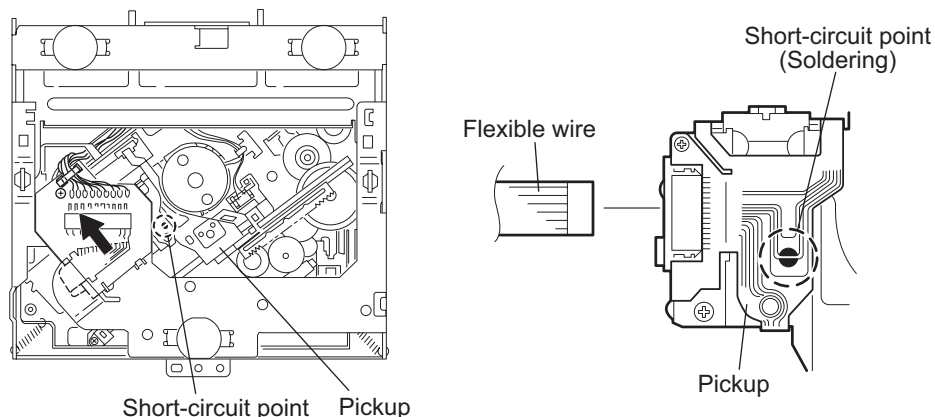
1.3 Handling the traverse unit (optical pickup)

- (1) Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
- (2) Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.
- (3) Handle the flexible cable carefully as it may break when subjected to strong force.
- (4) It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

1.4 Attention when traverse unit is decomposed

***Please refer to "Disassembly method" in the text for the CD pickup unit.**

- Apply solder to the short land before the flexible wire is disconnected from the connector on the CD pickup unit. (If the flexible wire is disconnected without applying solder, the CD pickup may be destroyed by static electricity.)
- In the assembly, be sure to remove solder from the short land after connecting the flexible wire.



1.5 Important for laser products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The CD,MD and DVD player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified here in may result in hazardous radiation exposure.



CAUTION Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated.

AVOID DIRECT EXPOSURE TO BEAM.

ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling.

VARNING : Synlig och osynlig laserstråling när den öppnas och spärren är urkopplad. Betrakta ej strålen.

VARO : Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi.

REPRODUCTION AND POSITION OF LABELS

WARNING LABEL

CLASS 1
LASER PRODUCT

CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling. (d)

VARNING : Synlig och osynlig laserstråling när den öppnas och spärren är urkopplad. Betrakta ej strålen. (s)

VARO : Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)

SECTION 2

SPECIFIC SERVICE INSTRUCTIONS

2.1 Difference point

[KD-AR470, KD-G420, KD-G524 and KD-G525]

	KD-AR470	KD-G420/KD-G524/KD-G525
Remote controller	YES	NO
Telephone Muting	YES	NO
Line Out Level / Impedance	4.0V / 20kohm load	2.5V / 20kohm load

[KD-G521, KD-G527]

	KD-G521	KD-G527
Steering wheel remote input	YES	NO

2.2 CD mechanism

For Cd mechanism, please refer mechanism annual No. MY001.

SECTION 3 DISASSEMBLY

3.1 Main body section

3.1.1 Removing the front panel assembly (See Fig.1)

- (1) Push the control panel release button in the lower left part of the front panel assembly and remove the front panel assembly.
- (2) Take out the front panel assembly.

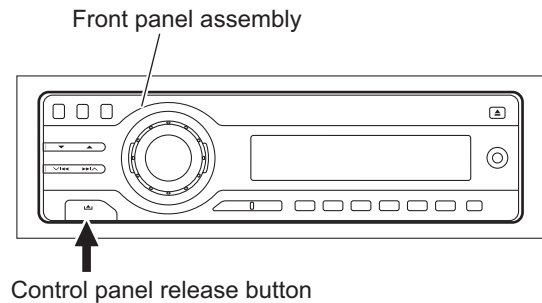


Fig.1

3.1.2 Removing the bottom cover (See Fig.2)

- (1) Turn the main body up side down.
- (2) Insert a screwdriver under the joints to release the joints **a** on the left side, joints **b** on the right side and joint **c** on the back side of the main body, then remove the bottom cover from the main body.

Caution:

When releasing the joints using a screwdriver, do not damage the main board.

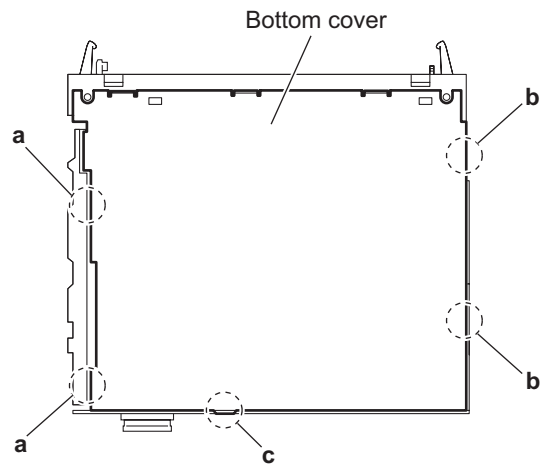


Fig.2

3.1.3 Removing the front chassis assembly (See Figs.3 and 4)

- Remove the front panel assembly and bottom cover.
 - (1) Remove the two screws **A** on the front side of the main body. (See Fig.3)
 - (2) Remove the two screws **B** on the both sides of the main body. (See Fig.4)
 - (3) Release the joints **d** and joints **e** on the both sides of the main body, then remove the front chassis assembly toward the front. (See Fig.4)

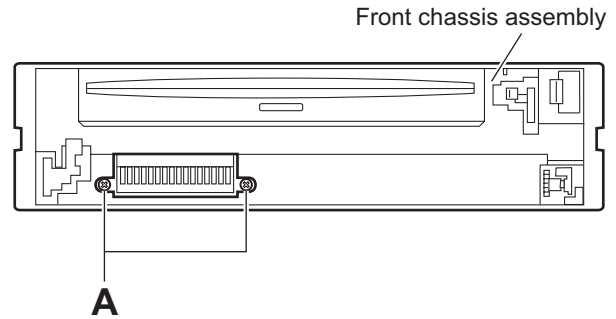


Fig.3

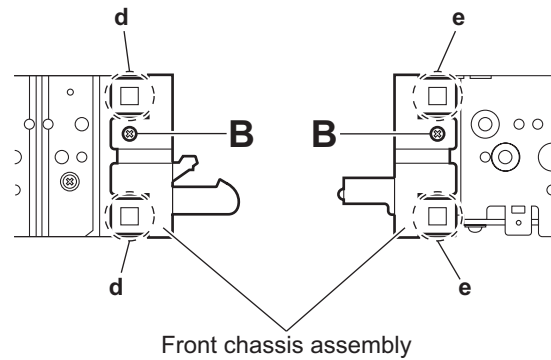


Fig.4

3.1.4 Removing the side panel (See Fig.5)

Reference:

Remove the front panel assembly as required.

- (1) Remove the two screws **C** and screw **D** attaching the side panel on the left side of the main body.
- (2) Take out the side panel from the main body.

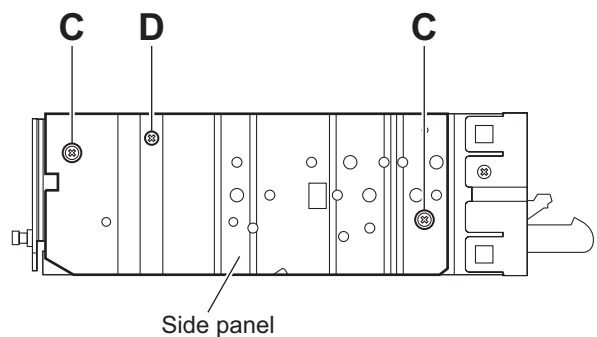


Fig.5

3.1.5 Removing the rear bracket (See Fig.6)

[For KD-AR470, KD-G420, KD-G524 and KD-G525]

- Remove the bottom cover.
 - (1) Remove the three screws **E**, three screws **F** and three screws **G** attaching the rear bracket on the back side of the main body.
 - (2) Take out the rear bracket.

3.1.6 Removing the rear bracket (See Fig.6)

[For KD-G521 and KD-G527]

- Remove the bottom cover.
 - (1) Remove the three screws **E**, three screws **F** and screw **G** attaching the rear bracket on the back side of the main body.
 - (2) Remove the screw **H** attaching the steering remote cable on the rear bracket. [KD-G521 only]
 - (3) Take out the rear bracket.

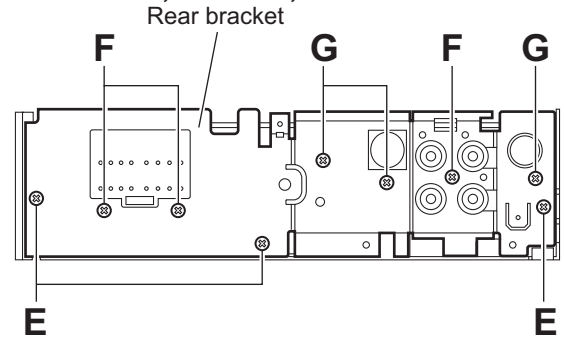
3.1.7 Removing the main board (See Figs.6 and 7)

- Remove the front panel assembly, bottom cover, front chassis assembly and side panel.
 - (1) Remove the three screws **E** attaching the rear bracket on the back side of the main body. (See Fig.6.)
 - (2) Remove the two screws **J** attaching the main board. (See Fig.7.)
 - (3) Disconnect the connector [CN101](#) and take out the main board. (See Fig.7.)

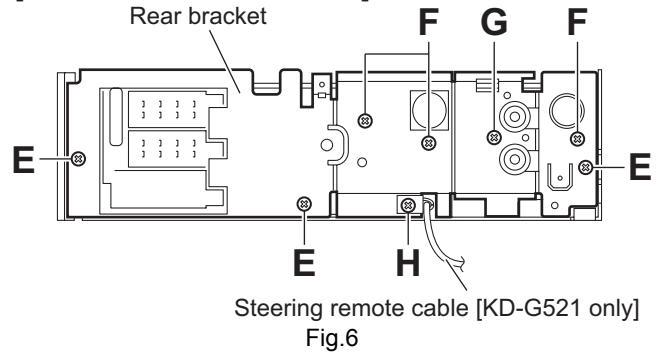
Reference:

Remove the rear bracket as required.

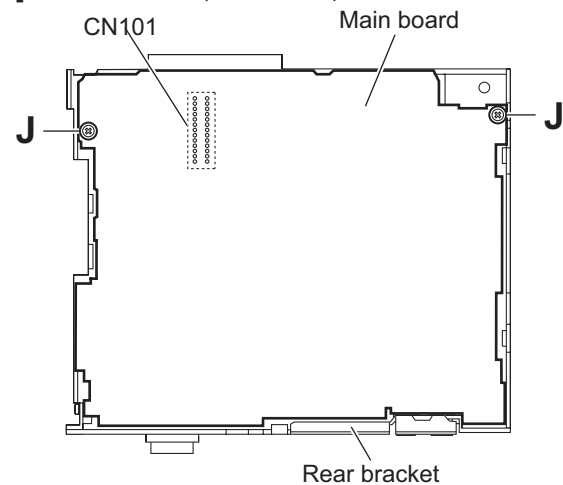
[For KD-AR470, KD-G420, KD-G524 and KD-G525]



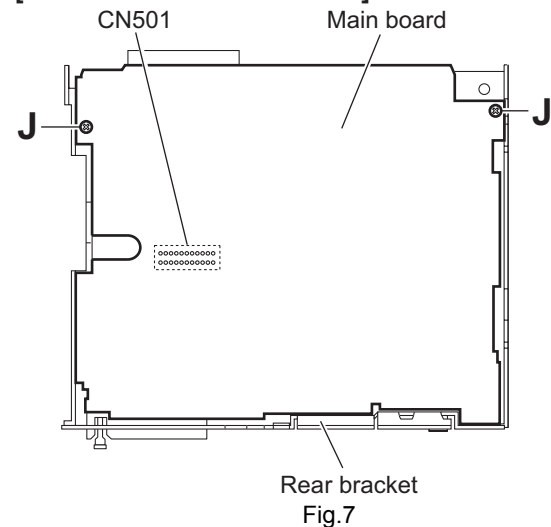
[For KD-G521 and KD-G527]



[For KD-AR470, KD-G420, KD-G524 and KD-G525]



[For KD-G521 and KD-G527]



3.1.8 Removing the CD mechanism control board (See Fig.8)

[For KD-AR470, KD-G420, KD-G524 and KD-G525]

- Remove the front panel assembly, bottom cover, front chassis assembly, side panel and main board.
 - Disconnect the card wire from the connector [CN601](#) on the CD mechanism control board.
 - Remove the five screws **K** attaching the CD mechanism control board.
 - Remove the joint **f** an upward direction and remove the joint **g** in the direction of the arrow.

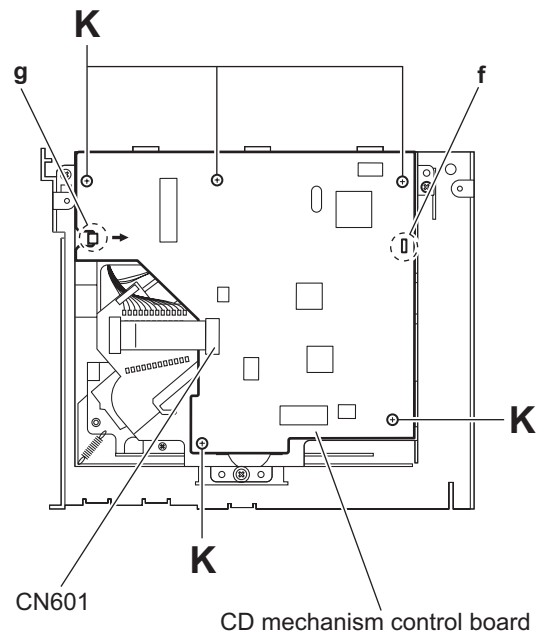


Fig.8

3.1.9 Removing the CD mechanism assembly (See Fig.9)

- Remove the front panel assembly, bottom cover, front chassis assembly, side panel, main board and CD mechanism control board.
 - Remove the three screws **M** attaching the top chassis.
 - Take out the CD mechanism assembly.

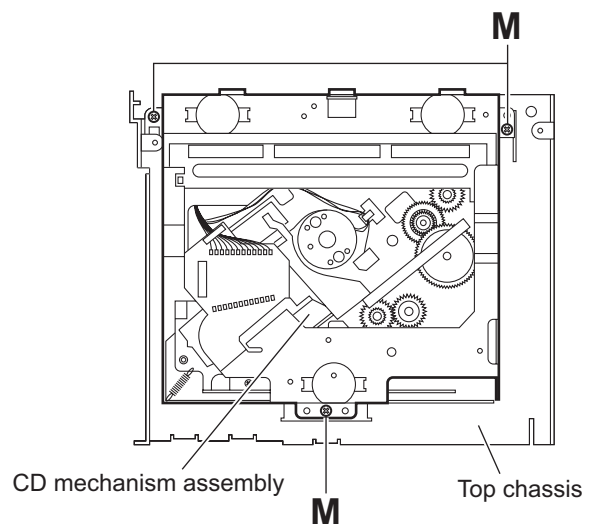


Fig.9

3.1.10 Removing the switch board

(See Figs.10 to 12)

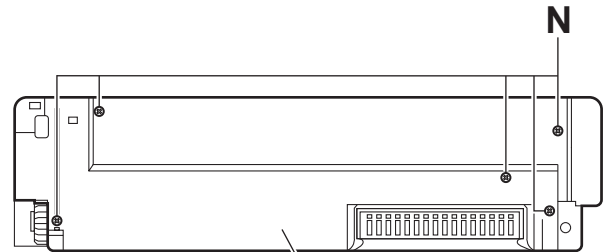
- Remove the front panel assembly.
 - (1) Remove the five screws **N** attaching the front panel assembly. (See Fig.10)
 - (2) Release the ten joints **h** and take out the rear cover. (See Fig.11)
 - (3) Lift the switch board from the front panel assembly little by little and take out the switch board. (See Fig.12)

Reference:

The volume knob is removed from the front side simultaneously.

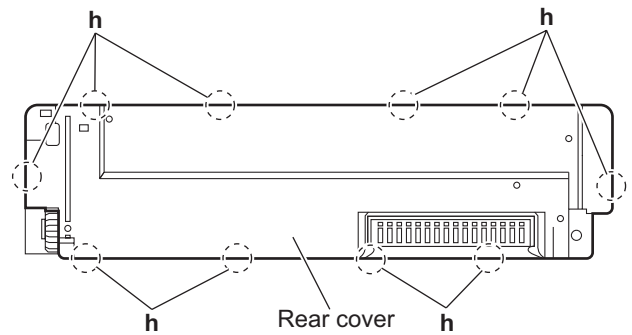
Note:

When removing the rear cover assembly and switch board, be careful not to lose the compression spring and comp. spring. (See Fig.12)



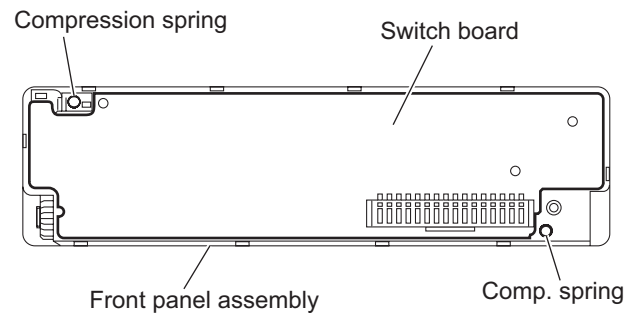
Rear cover

Fig.10



Rear cover

Fig.11



Compression spring

Switch board

Front panel assembly

Comp. spring

Fig.12

SECTION 4 ADJUSTMENT

4.1 Adjustment method

■ Test instruments required for adjustment

- (1) Digital oscilloscope (100MHz)
- (2) Electric voltmeter
- (3) Digital tester
- (4) Tracking offset meter
- (5) Test Disc JVC :CTS-1000
- (6) Extension cable for check
EXTSH002-22P × 1

■ Standard volume position

Balance and Bass & Treble volume : Indication "0"
Loudness : OFF

■ How to connect the extension cable for adjusting [For KD-AR470, KD-G420, KD-G524 and KD-G525]

Caution:

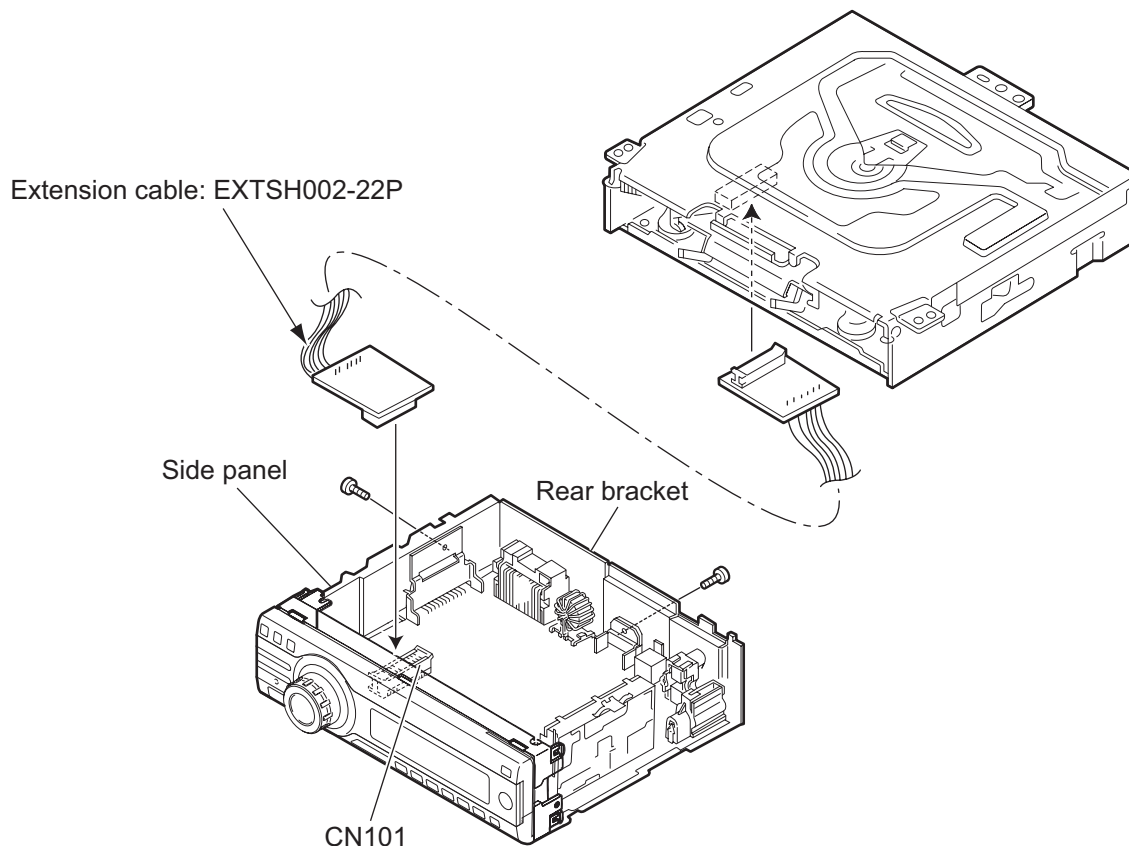
Be sure to attach the heat sink and rear bracket onto the power amplifier IC and regulator IC respectively, before supply the power.
If voltage is applied without attaching these parts, the power amplifier IC and regulator IC will be destroyed by heat.

■ Standard measuring conditions

Power supply voltage	DC14.4V(11 to 16V)
Load impedance	20K Ω (2 Speakers connection)
Output Level	
	KD-ARxxx Line out 4.0V (Vol. MAX)
	KD-Gxxx Line out 2.5V (Vol. MAX)

■ Dummy load

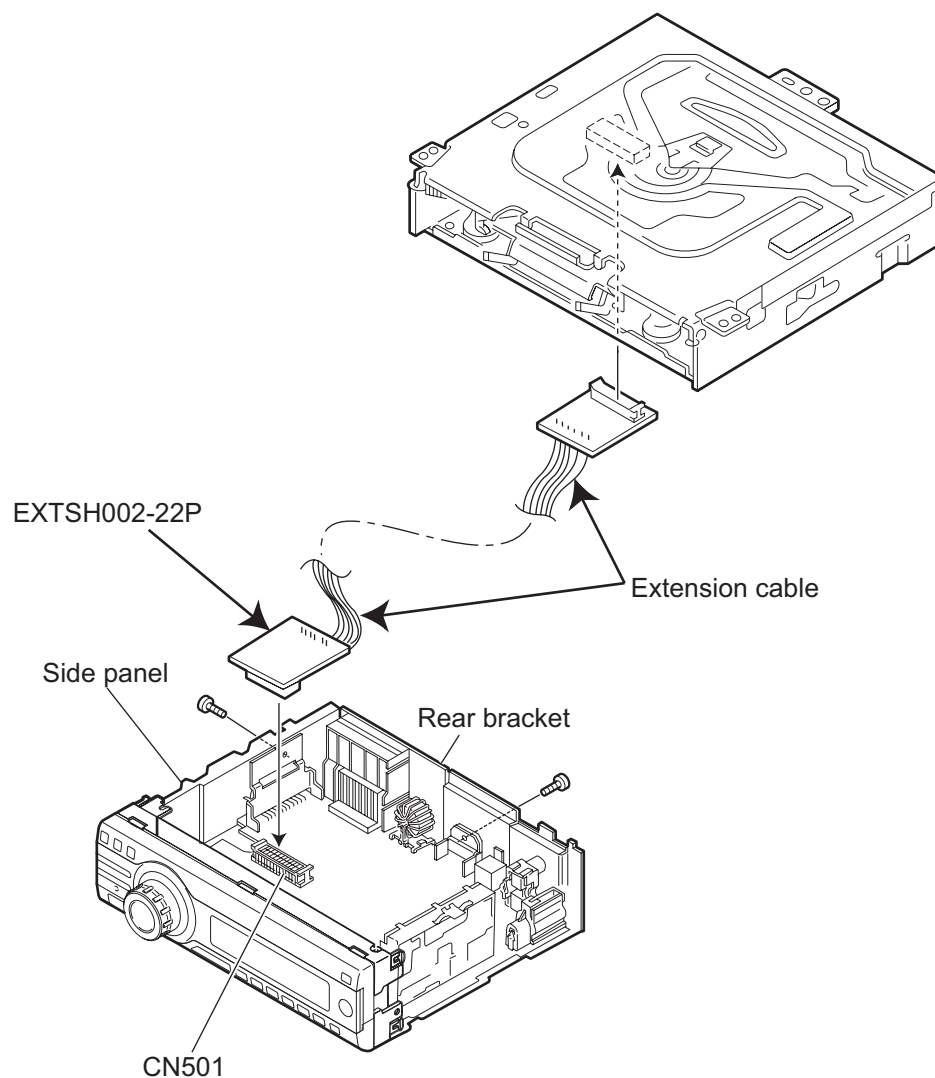
Exclusive dummy load should be used for AM, and FM. For FM dummy load, there is a loss of 6dB between SSG output and antenna input. The loss of 6dB need not be considered since direct reading of figures are applied in this working standard.



■ How to connect the extension cable for adjusting
[For KD-G521 and KD-G527]

Caution:

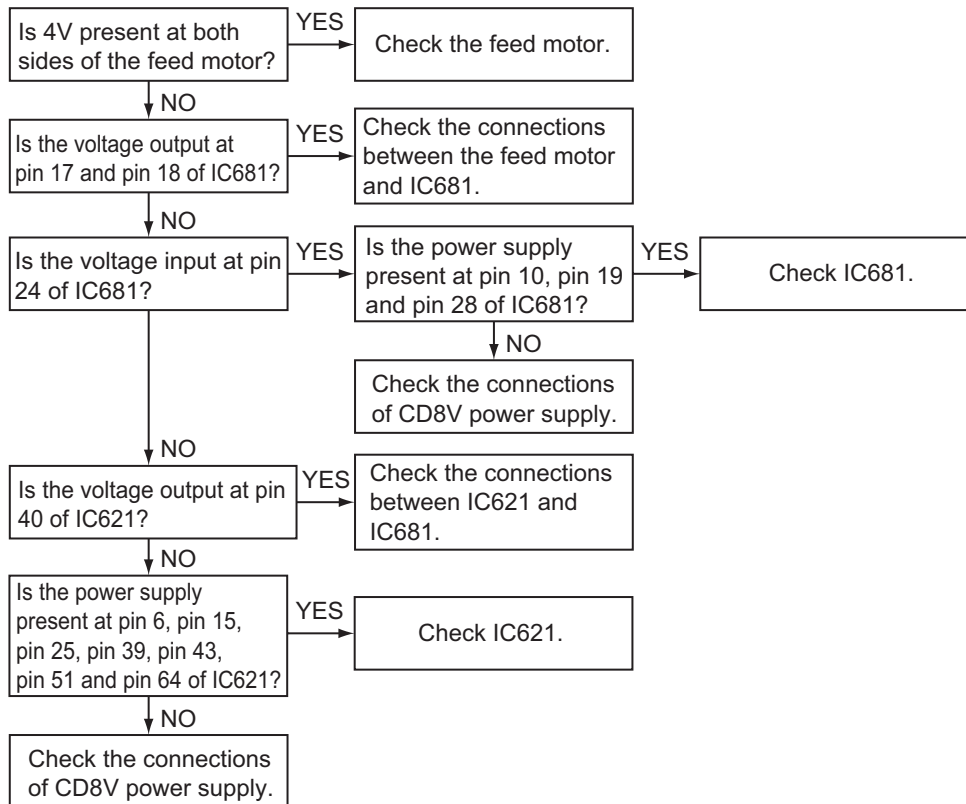
Be sure to attach the heat sink and rear bracket onto the power amplifier IC and regulator IC respectively, before supply the power. If voltage is applied without attaching these parts, the power amplifier IC and regulator IC will be destroyed by heat.



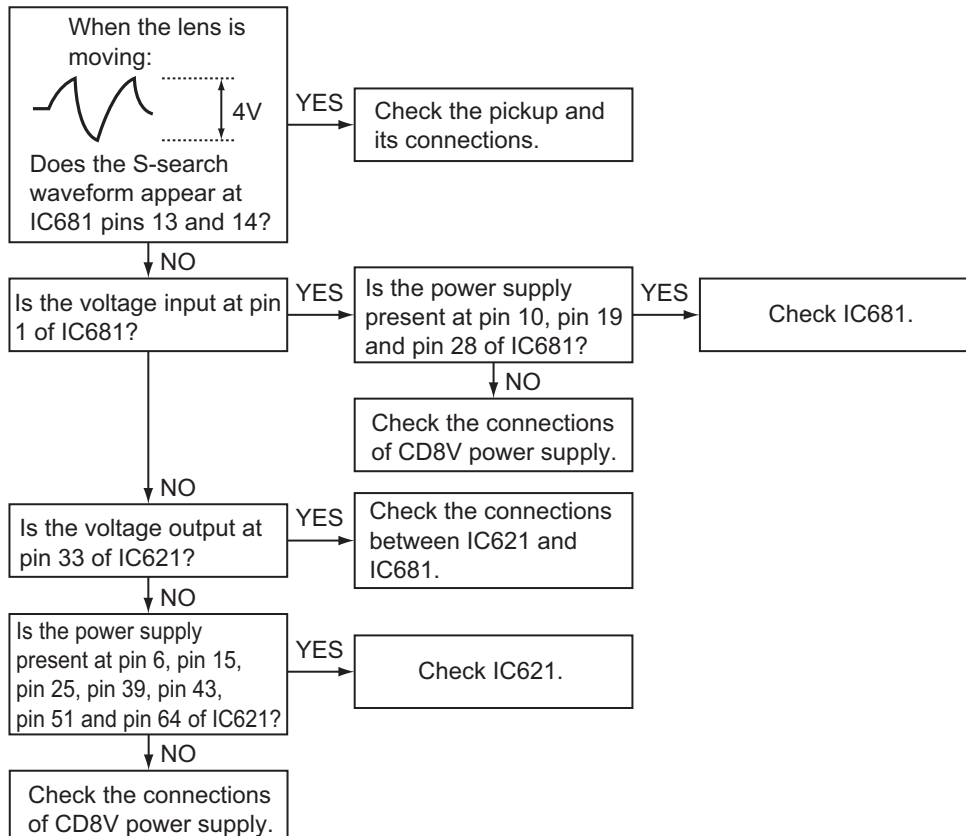
SECTION 5 TROUBLESHOOTING

5.1 Trouble shooting (For KD-AR470, KD-G420, KD-G524 and KD-G525)

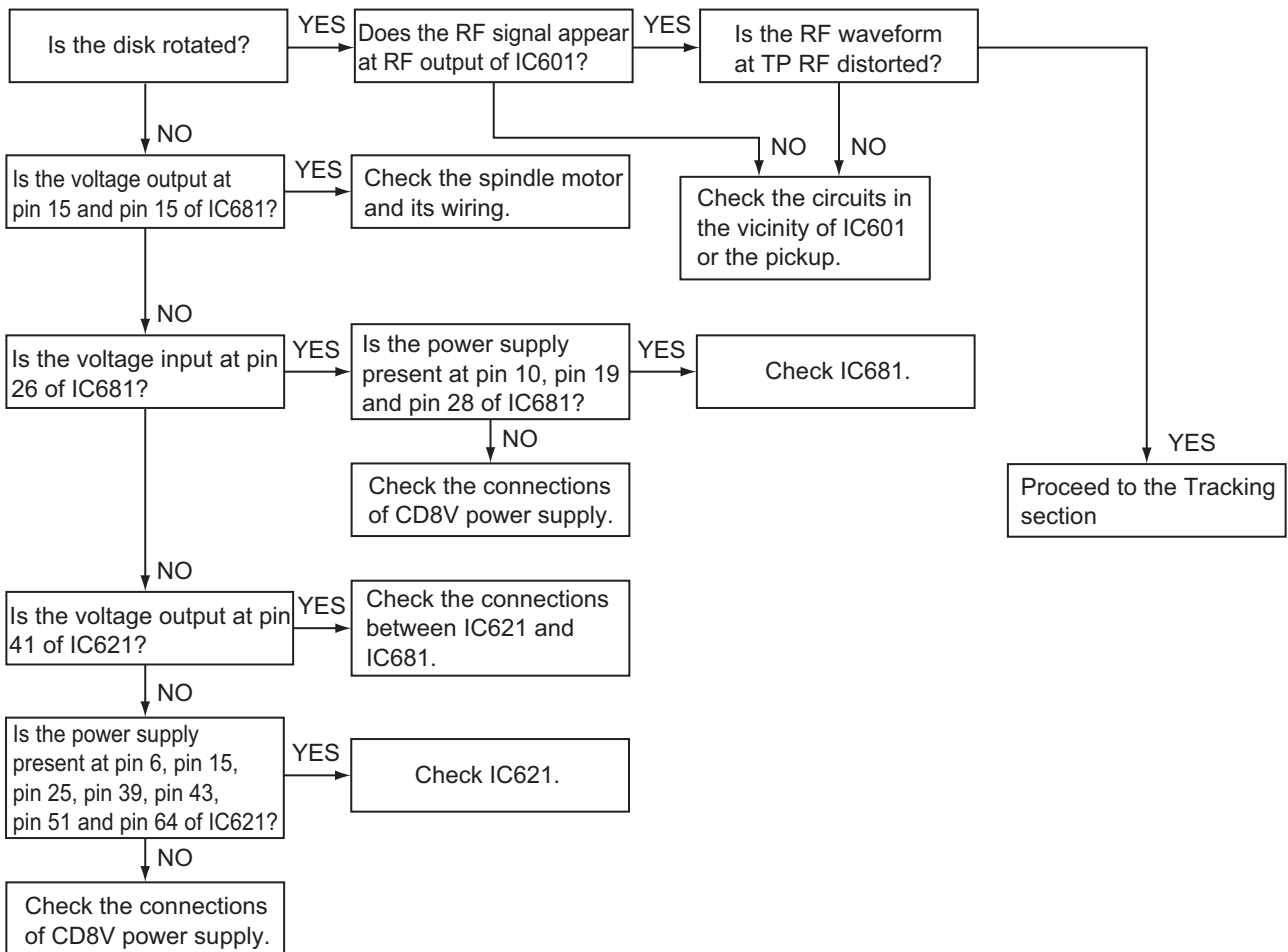
5.1.1 Feed section



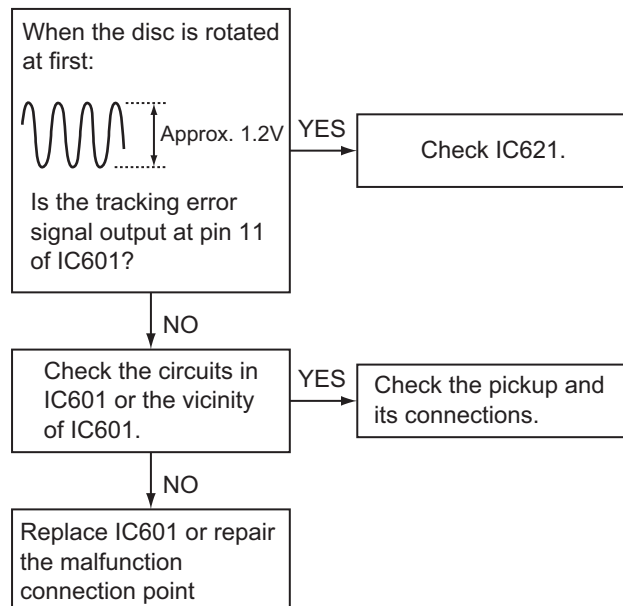
5.1.2 Focus section



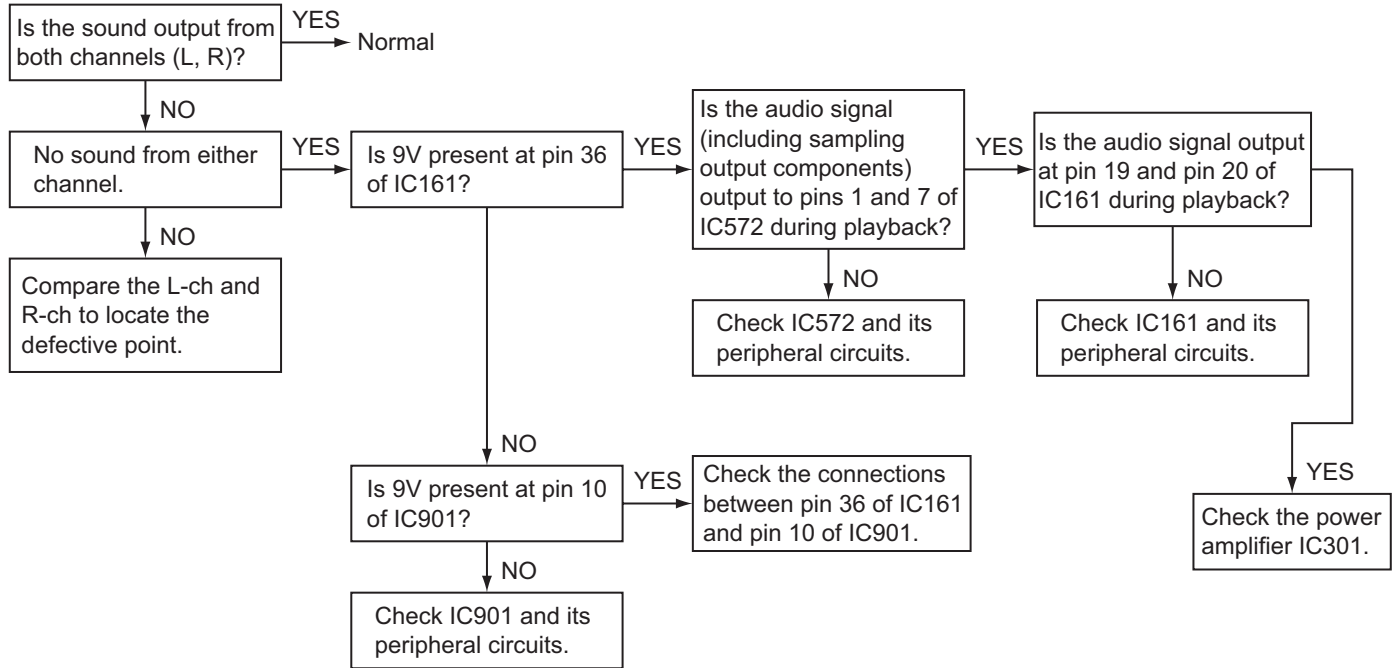
5.1.3 Spindle section



5.1.4 Tracking section

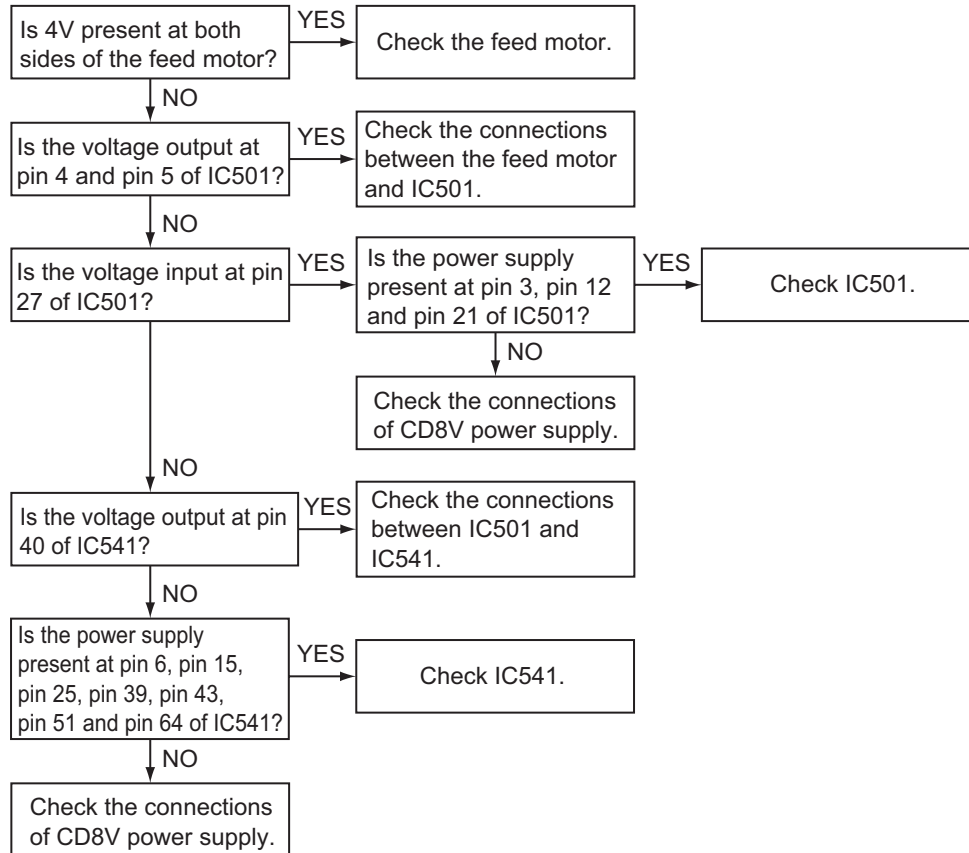


5.1.5 Signal processing section

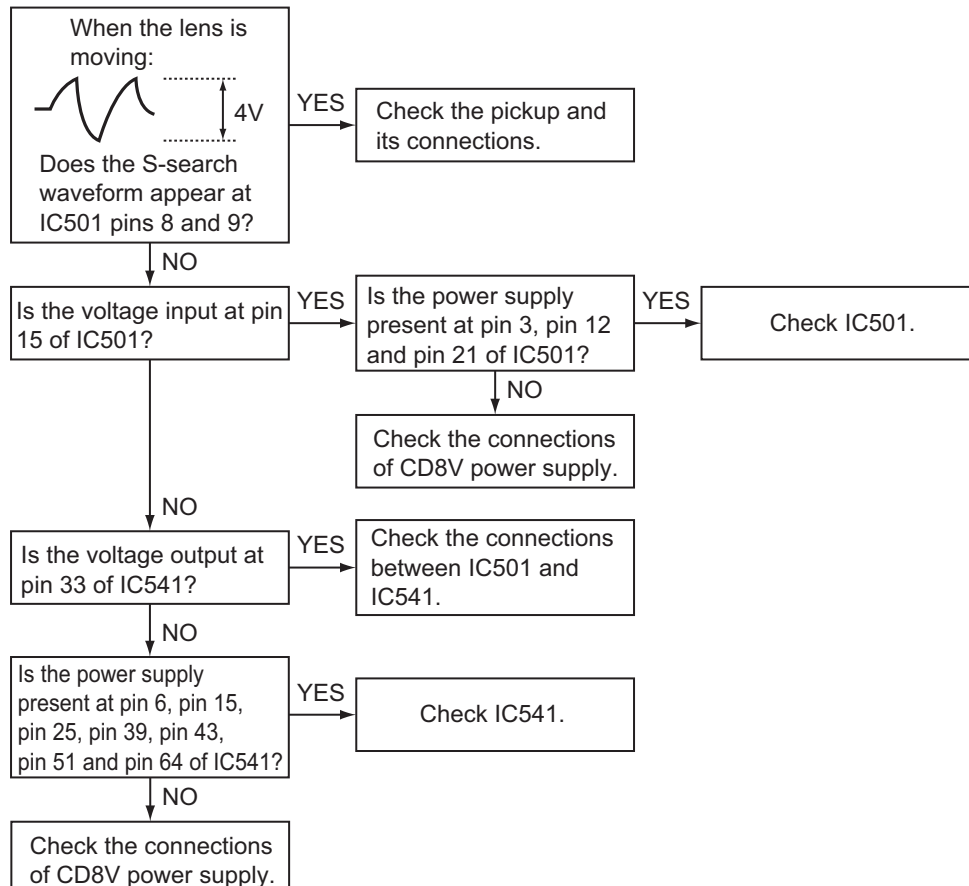


5.2 Trouble shooting (For KD-G521 and KD-G527)

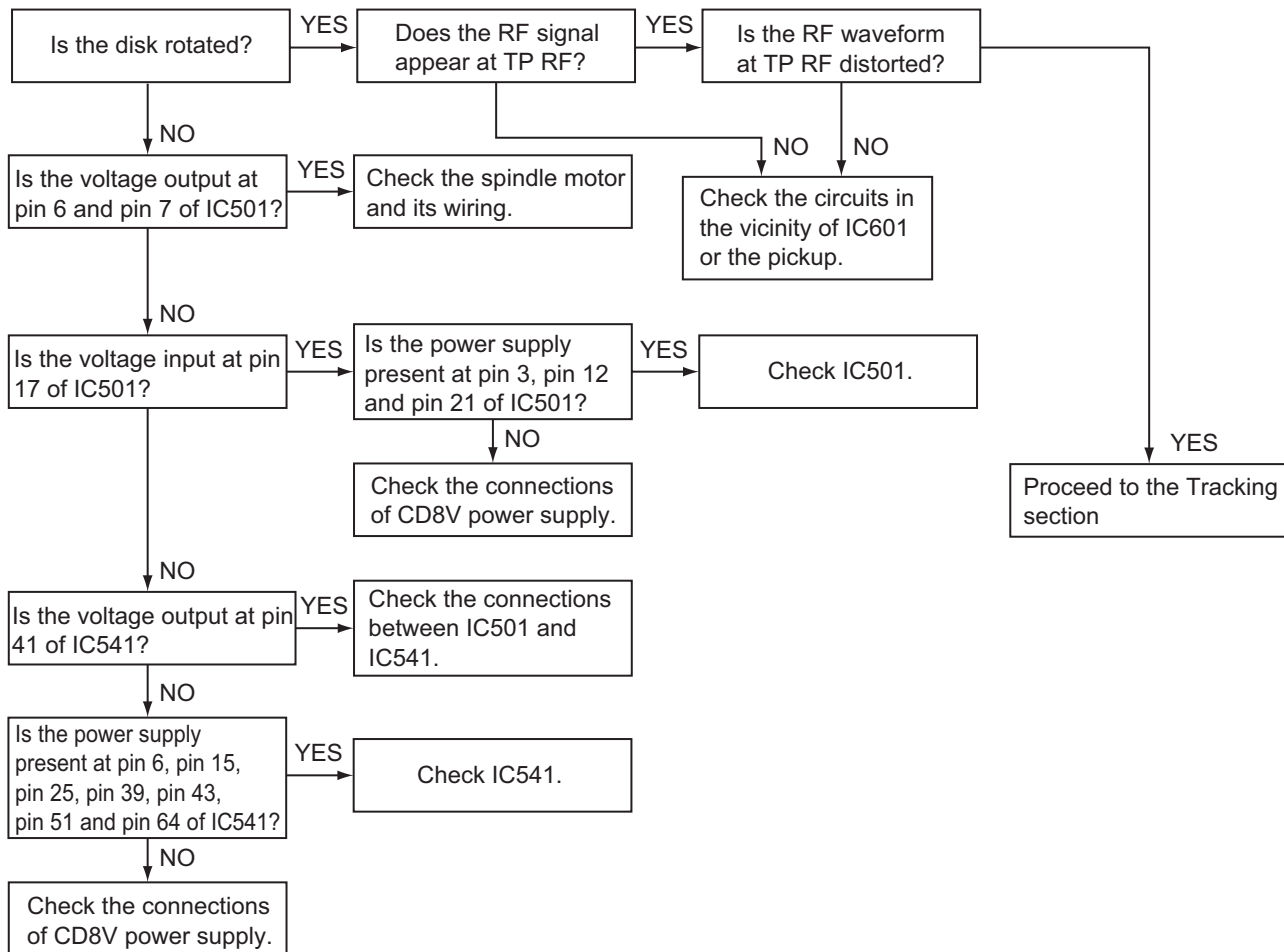
5.2.1 Feed section



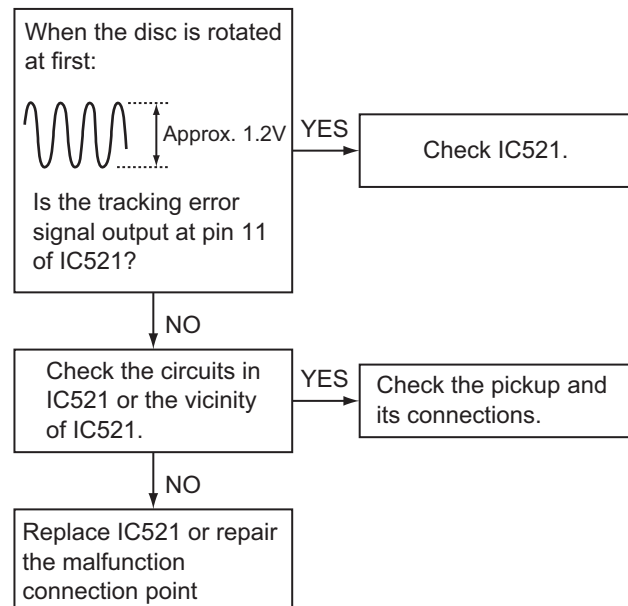
5.2.2 Focus section



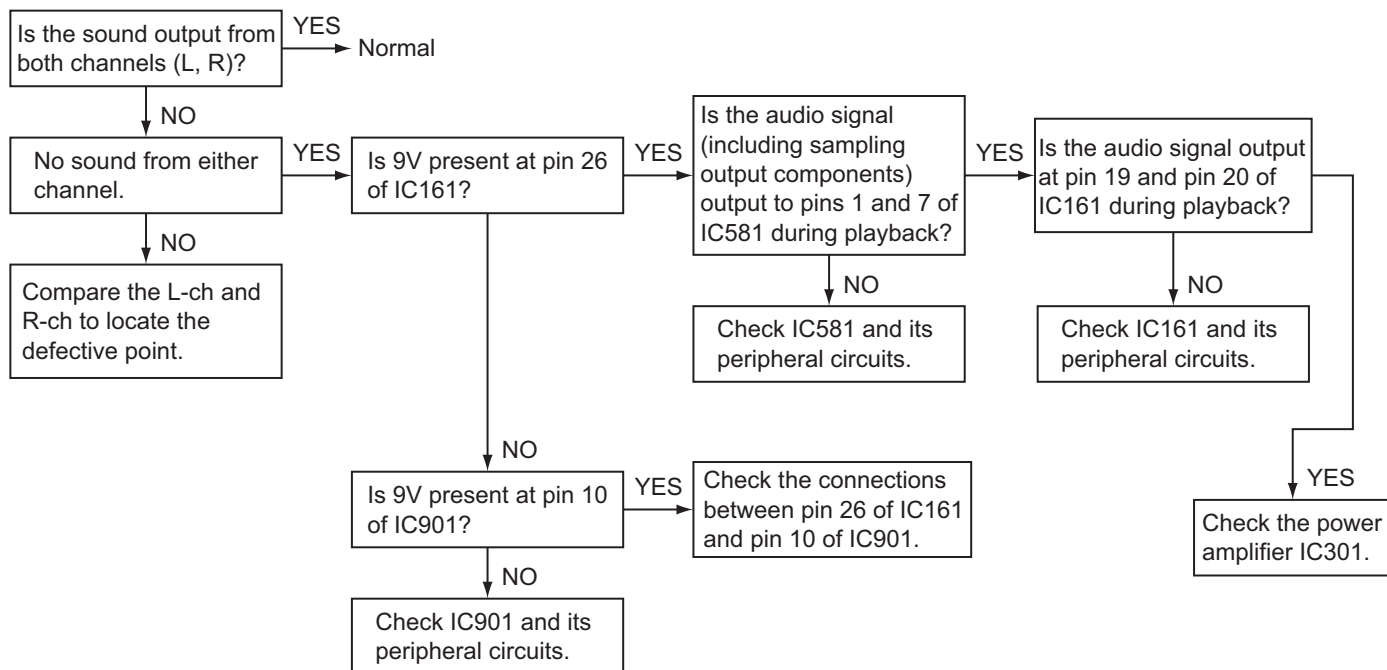
5.2.3 Spindle section



5.2.4 Tracking section



5.2.5 Signal processing section



5.3 Maintenance of laser pickup

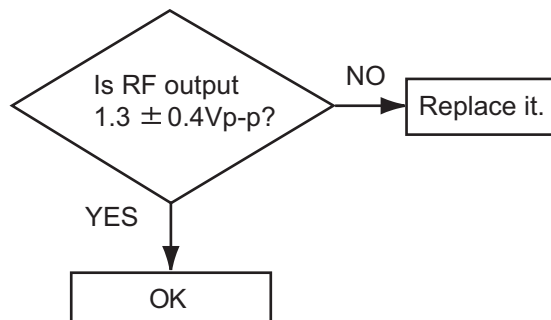
(1) Cleaning the pick up lens

Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

(2) Life of the laser diode

When the life of the laser diode has expired, the following symptoms will appear.

- The level of RF output (EFM output: amplitude of eye pattern) will be low.

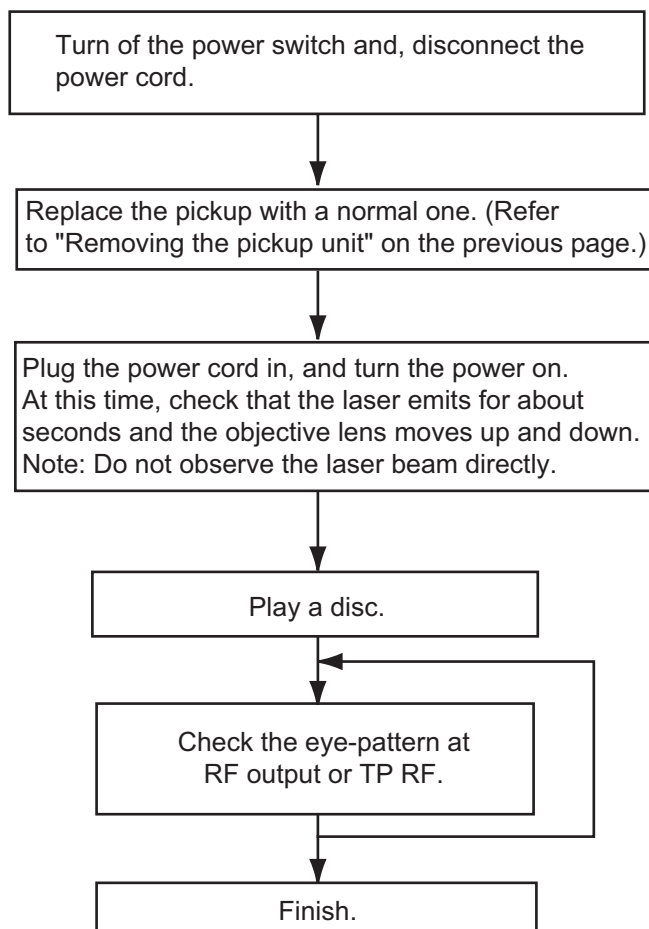


(3) Semi-fixed resistor on the APC PC board

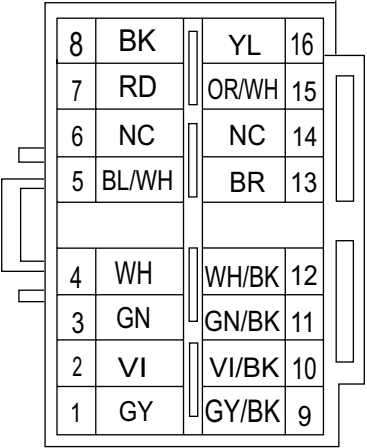
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.

If the laser power is lower than the specified value, the laser diode is almost worn out, and the laser pickup should be replaced. If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

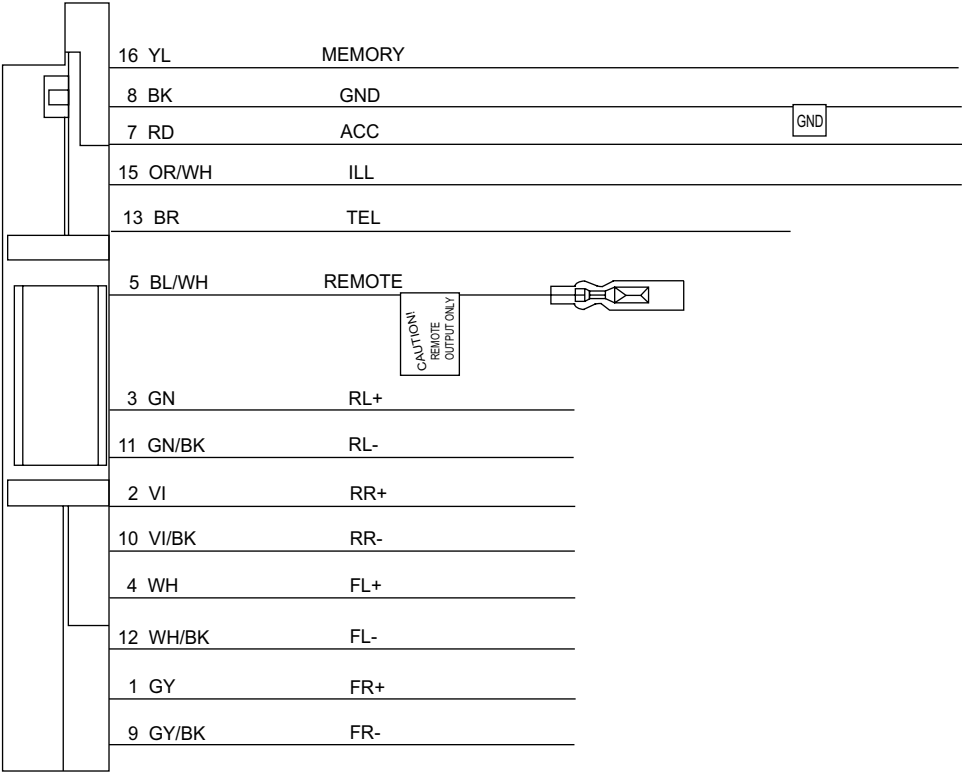
5.4 Replacement of laser pickup



5.5 16 PIN CORD DIAGRAM [for KD-AR470]

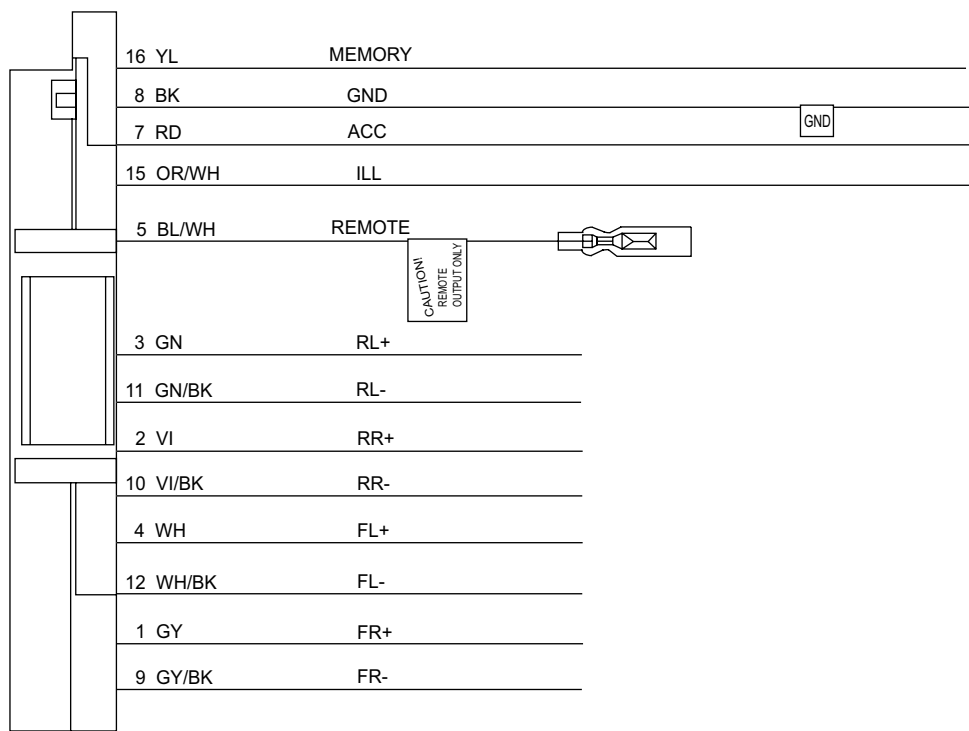
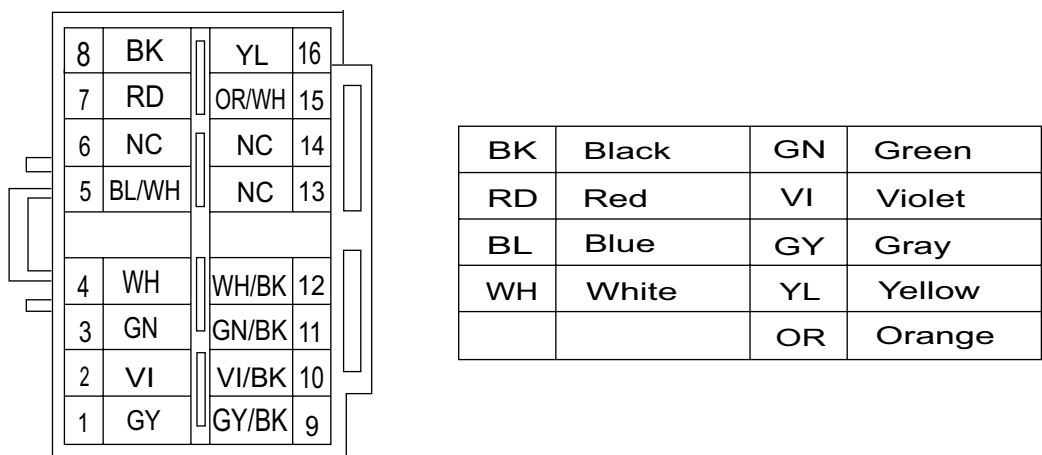


BK	Black	GN	Green
RD	Red	VI	Violet
BL	Blue	GY	Gray
WH	White	YL	Yellow
BR	Brown	OR	Orange



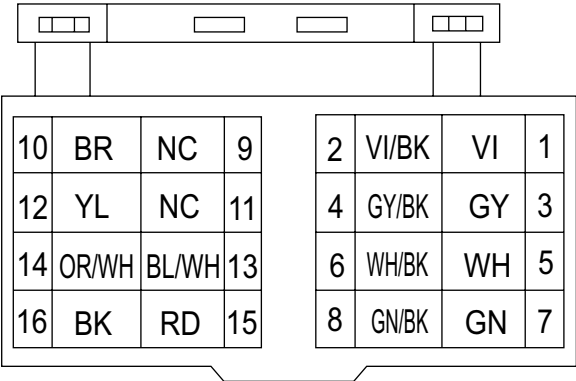
RR	Rear Right	REMOTE	Remote out
FR	Front Right	ACC	ACC Line
FL	Front Left	MEMORY	Memory Backup Battery +
RL	Rear Left	GND	Ground
TEL	Telephone muting	ILL	Illuminations Control

5.6 16 PIN CORD DIAGRAM [for KD-G420]



RR	Rear Right	REMOTE	Remote out
FR	Front Right	ACC	ACC Line
FL	Front Left	MEMORY	Memory Backup Battery +
RL	Rear Left	GND	Ground
		ILL	Illuminations Control

5.7 16 PIN CORD DIAGRAM [for KD-G521 and KD-G527]

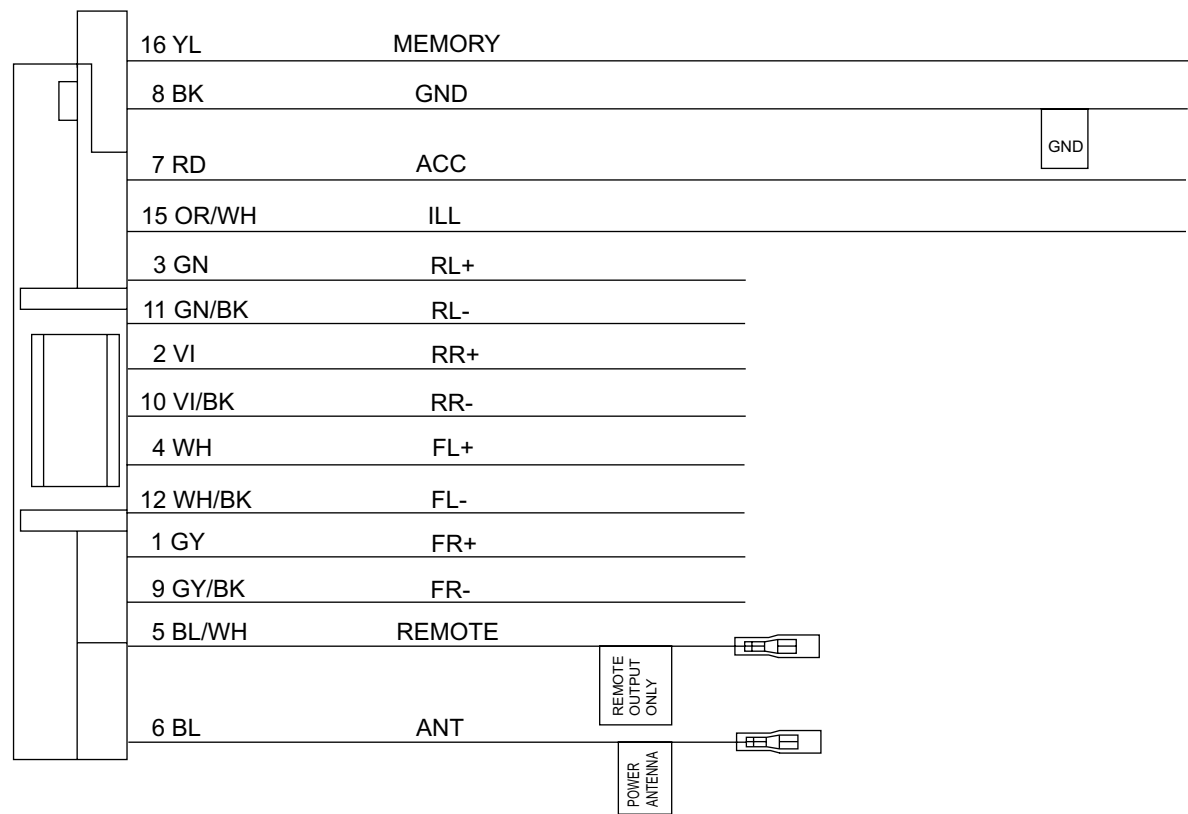
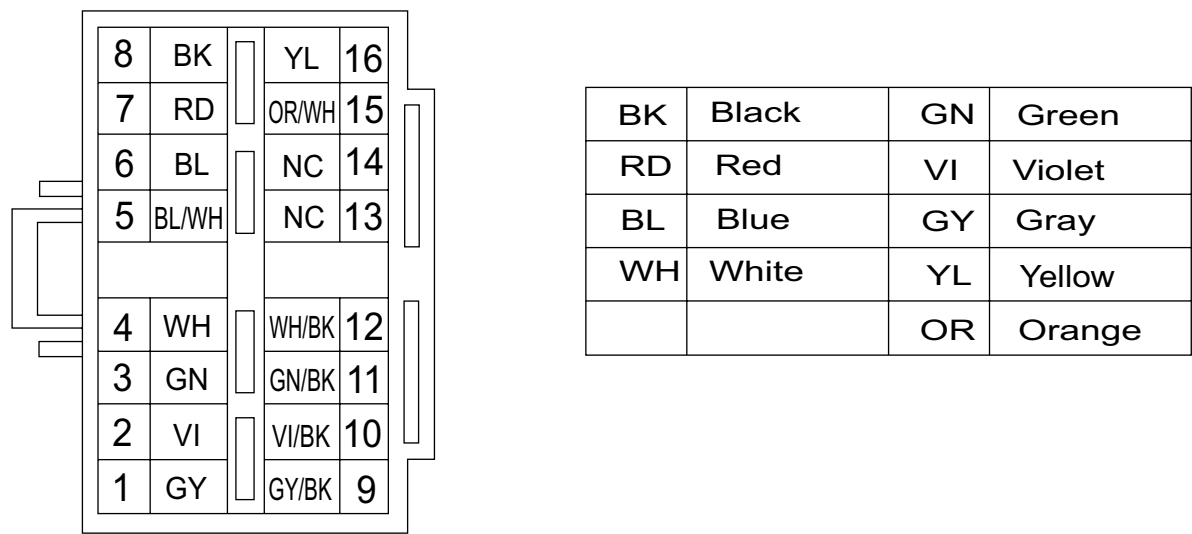


BK	Black	GN	Green
RD	Red	VI	Violet
BL	Blue	GY	Gray
WH	White	YL	Yellow
BR	Brown	OR	Orange



RR	Rear Right	ANT	Auto Antenna
FR	Front Right	ACC	ACC Line
FL	Front Left	TEL	Telephone Muting
RL	Rear Left	GND	Ground
REMOTE	Remote out	MEMORY	Memory Backup Battery+
ILL	Illuminations Control		

5.8 16 PIN CORD DIAGRAM [for KD-G524 and KD-G525]



RR	Rear Right	ANT	Auto Antenna
FR	Front Right	ACC	ACC Line
FL	Front Left	ILL	Illuminations Control
RL	Rear Left	GND	Ground
REMOTE	Remote out	MEMORY	Memory Backup Battery+



Victor Company of Japan, Limited
Mobile Entertainment Business Group Mobile Entertainment Category 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.MA232)



Printed in Japan
VPT

JVC



CD RECEIVER

KD-AR470/KD-G420

ENGLISH

RECEPTOR CON CD

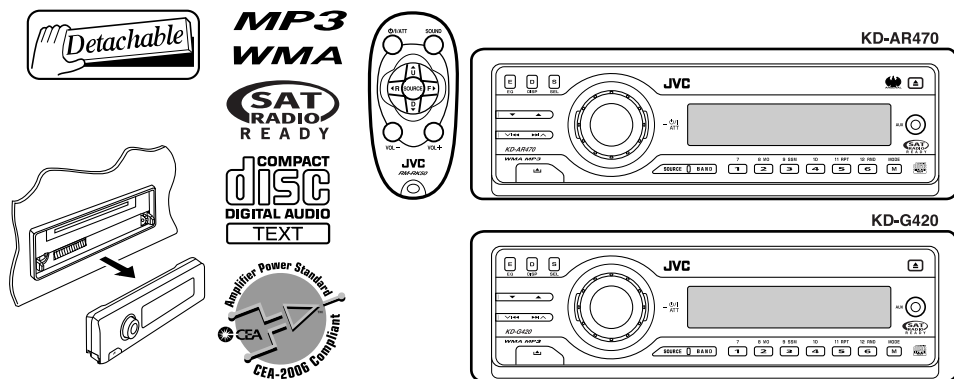
KD-AR470/KD-G420

ESPAÑOL

RECEPTEUR CD

KD-AR470/KD-G420

FRANÇAIS



For canceling the display demonstration, see page 7.

Para cancelar la demostración en pantalla, consulte la página 7.

Pour annuler la démonstration des affichages, référez-vous à la page 7.

For installation and connections, refer to the separate manual.

Para la instalación y las conexiones, refiérase al manual separado.

Pour l'installation et les raccordements, se référer au manuel séparé.

For customer Use:

Enter below the Model No. and Serial No. which are located on the top or bottom of the cabinet. Retain this information for future reference.

Model No. _____

Serial No. _____

INSTRUCTIONS

MANUAL DE INSTRUCCIONES

MANUEL D'INSTRUCTIONS

GET0336-001A

[J]

Thank you for purchasing a JVC product.

Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

INFORMATION (For U.S.A.)

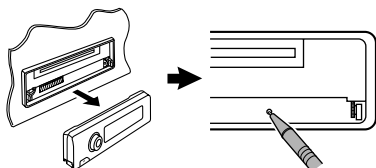
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IMPORTANT FOR LASER PRODUCTS

1. CLASS 1 LASER PRODUCT
2. **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
3. **CAUTION:** Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

How to reset your unit

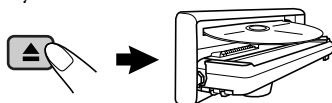


Your preset adjustments will also be erased.

How to forcibly eject a disc



“PLEASE” and “EJECT” appear alternately on the display.

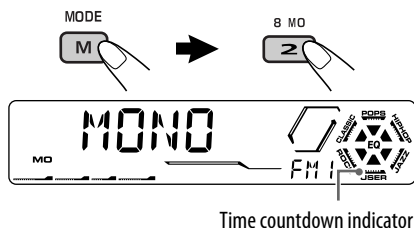


- If this does not work, reset your unit.
- Be careful not to drop the disc when it ejects.

How to use the M MODE button

If you press M MODE, the unit goes into functions mode, then the number buttons and ▲/▼ buttons work as different function buttons.

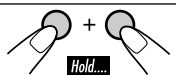
Ex.: When number button 2 works as MO (monaural) button.



To use these buttons for their original functions again after pressing M MODE, wait for 5 seconds without pressing any of these buttons until the functions mode is cleared or press M MODE again.

How to read this manual

- Button operations are mainly explained with the illustrations in the table below.
- Some related tips and notes are explained in “More about this unit” (see pages 20 – 22).

	Press briefly.
	Press repeatedly.
	Press either one.
	Press and hold until your desired response begins.
	Press and hold both buttons at the same time.

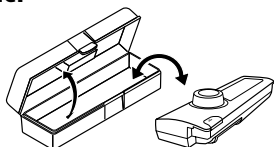
The following marks are used to indicate...

 : Built-in CD player operations.

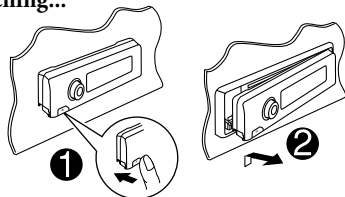
 : External CD changer operations.

 : Indicator displayed for the corresponding operation.

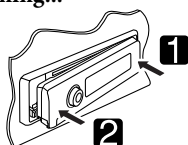
How to detach/attach the control panel



Detaching...



Attaching...



CONTENTS

Control panel — KD-AR470 and KD-G420	4
Remote controller — RM-RK50	5
Getting started	6
Basic operations.....	6
Radio operations	7
Disc operations	8
Playing a disc in the unit	8
Playing discs in the CD changer	9
Sound adjustments	11
General settings — PSM	12
Title assignment	15
External component operations	16
Satellite radio operations	17
More about this unit	20
Maintenance	22
Troubleshooting	23
Specifications	25

Warning:

If you need to operate the unit while driving, be sure to look ahead carefully or you may be involved in a traffic accident.

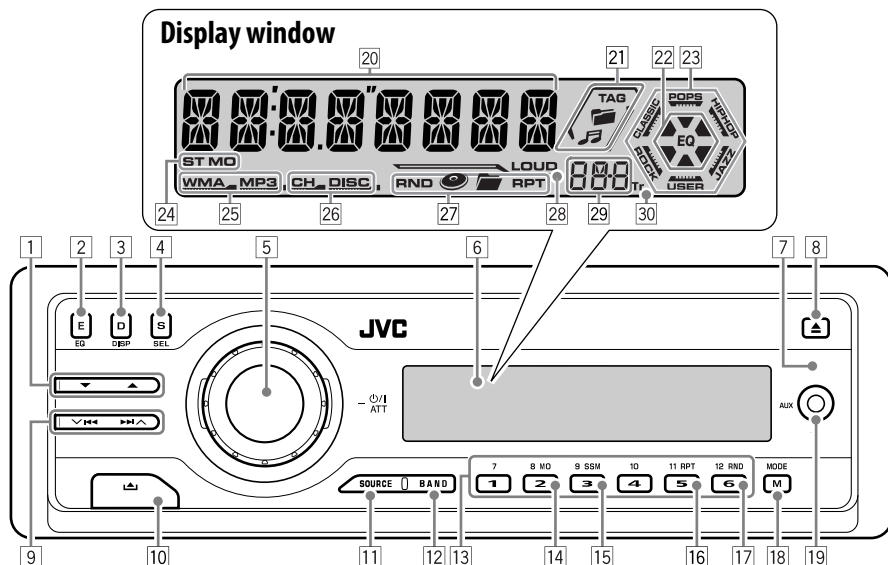
For safety...

- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operations.

Temperature inside the car...

If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.

Parts identification

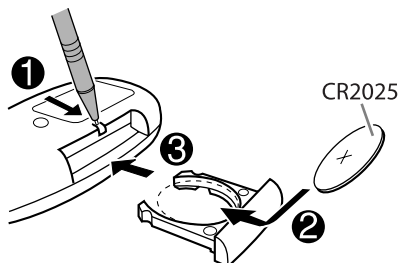


- 1 ▲ (up) / ▼ (down) buttons
 - 2 E EQ (equalizer) button
 - 3 D DISP (display) button
 - 4 S SEL (select) button
 - 5 • Control dial
 - / I ATT (standby/on attenuator) button
 - 6 Display window
 - 7 Remote sensor
 - *DO NOT expose the remote sensor to strong light (direct sunlight or artificial lighting).*
 - 8 ▲ (eject) button
 - 9 ▼ |◀◀/▶▶| ▲ buttons
 - 10 (control panel release) button
 - 11 SOURCE button
 - 12 BAND button
 - 13 Number buttons
 - 14 MO (monaural) button
 - 15 SSM (Strong-station Sequential Memory) button
 - 16 RPT (repeat) button
 - 17 RND (random) button
 - 18 M MODE button
 - 19 AUX (auxiliary) input jack
 - 20 Main display
 - 21 Disc information indicators—TAG (ID3 Tag), (folder), (track/file)
 - 22 EQ (equalizer) indicator
 - 23 Sound mode (C-EQ: custom equalizer) indicators—ROCK, CLASSIC, POPS, HIP HOP, JAZZ, USER
 - also works as the time countdown indicator and level meter during play (see page 13).
 - 24 Tuner reception indicators—ST (stereo), MO (monaural)
 - 25 Disc type indicators—WMA, MP3
 - 26 Playback source indicators—
CH: *Lights up only when CD-CH is selected as the playback source.*
DISC: *Lights up for the built-in CD player.*
 - 27 Playback mode / item indicators—
RND (random), (disc), (folder),
RPT (repeat)
 - 28 LOUD (loudness) indicator
 - 29 Source display / Volume level indicator
 - 30 Tr (track) indicator

Remote controller — RM-RK50

RM-RK50 is supplied for KD-AR470. KD-G420 can be remotely controlled as instructed here (with an optionally purchased remote controller). We recommend you to use RM-RK50 or RM-RK60 with your unit.

■ Installing the lithium coin battery (CR2025)

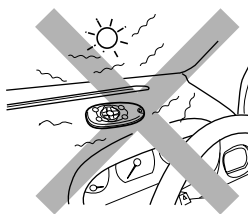


Aim the remote controller directly at the remote sensor on the unit. Make sure there is no obstacle in between.

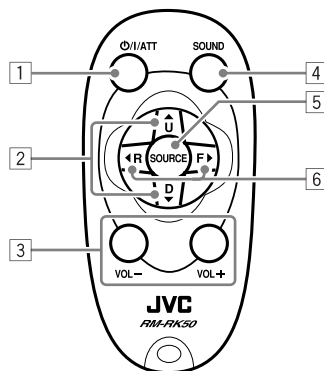
Warning:

- Do not install any battery other than CR2025 or its equivalent; otherwise, it may explode.
- Store the battery in a place where children cannot reach to avoid risk of accident.
- To prevent the battery from over-heating, cracking, or starting a fire:
 - Do not recharge, short, disassemble, heat the battery, or dispose of it in a fire.
 - Do not leave the battery with other metallic materials.
 - Do not poke the battery with tweezers or similar tools.
 - Wrap the battery with tape and insulate when throwing away or saving it.

Caution:



Main elements and features



- 1 **⏻/I/ATT** (standby/on/attenuator) button
 - Turns the power on if pressed briefly or attenuates the sound when power is on.
 - Turns the power off if pressed and held.
- 2 **▲ U (up) / D (down) ▼** buttons
 - Changes the FM/AM bands with **▲ U** only.
 - Changes the preset stations with **D ▼** only.
 - Changes the folder of the MP3/WMA discs.
 - While playing an MP3 disc on an MP3-compatible CD changer:
 - Changes the disc if pressed briefly.
 - Changes the folder if pressed and held.
 - While listening to the satellite (SIRIUS or XM) radio:
 - Changes the categories.

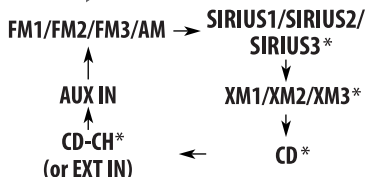
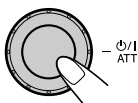
To be continued...

- 3 VOL - / VOL + buttons
 - Adjusts the volume level.
- 4 SOUND button
 - Selects the sound mode (C-EQ: custom equalizer).
- 5 SOURCE button
 - Selects the source.
- 6 ◀ R (reverse) / F (forward) ▶ buttons
 - Searches for stations if pressed briefly.
 - Fast-forwards or reverses the track if pressed and held.
 - Changes the tracks of the disc if pressed briefly.
 - While listening to the satellite radio:
 - Changes the channels if pressed briefly.
 - Changes the channels rapidly if pressed and held.

Getting started

Basic operations

- 1 Turn on the power.



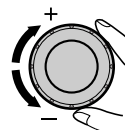
- Select "CD-CH" when using an Apple iPod® or a JVC D. player (see page 16).

iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.

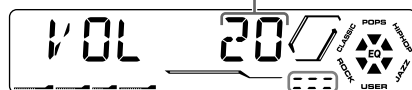
* You cannot select these sources if they are not ready or not connected.

- 3
 - For FM/AM tuner
 - For SIRIUS Satellite radio
 - For XM Satellite radio

- 4 Adjust the volume.



Volume level appears.



Volume level indicator

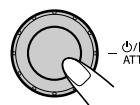
- 5 Adjust the sound as you want. (See pages 11 and 12.)

Caution on volume setting:

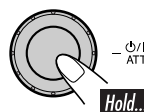
Discs produce very little noise compared with other sources. Lower the volume before playing a disc to avoid damaging the speakers by the sudden increase of the output level.

To drop the volume in a moment (ATT)

To restore the sound, press it again.

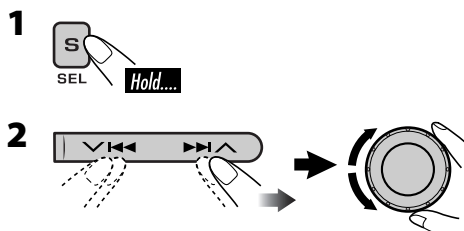


To turn off the power



Basic settings

- See also “General settings — PSM” on pages 12 – 14.



- 1 Canceling the display demonstrations**
Select “DEMO,” then “DEMO OFF.”
- 2 Setting the clock**
Select “CLOCK H” (hour), then adjust the hour.
Select “CLOCK M” (minute), then adjust the minute.

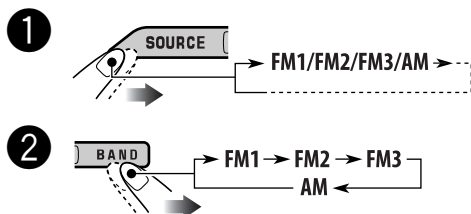
3 Finish the procedure.



To check the current clock time when the power is turned off



Radio operations

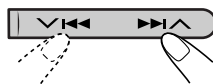


Lights up when receiving an FM stereo broadcast with sufficient signal strength.



Selected band appears.

3 Start searching for a station.

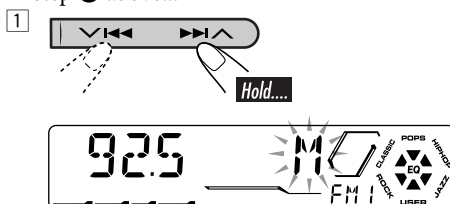


When a station is received, searching stops.

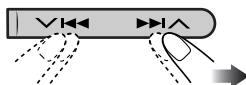
To stop searching, press the same button again.

To tune in to a station manually

In step 3 above...



2 Select the desired station frequencies.



When an FM stereo broadcast is hard to receive



Lights up when monaural mode is activated.

Reception improves, but stereo effect will be lost.

To restore the stereo effect, repeat the same procedure. “MONO OFF” appears and the MO indicator goes off.

Storing stations in memory

You can preset six stations for each band.

FM station automatic presetting—SSM (Strong-station Sequential Memory)

- 1 Select the FM band (FM1 – FM3) you want to store into.



- 2 MODE button is pressed, and 'M' is displayed on the screen.

- 3 9 SSM button is pressed, and 'SSM' is displayed on the screen. The text 'Hold....' is shown below the button.

"SSM" flashes, then disappears when automatic presetting is over.

Local FM stations with the strongest signals are searched and stored automatically in the FM band.

Manual presetting

Ex.: Storing FM station of 92.5 MHz into preset number 4 of the FM1 band.

- 1 BAND button is pressed, with arrows indicating the selection of FM1, FM2, or FM3, and AM.

- 2 The frequency 92.5 is displayed on the screen.

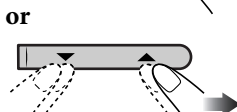
- 3 10 4 button is pressed, and 'P4' is displayed on the screen. The text 'Hold....' is shown below the button. The screen also displays various icons: POPS, EQ, REVERSE, and others.

Preset number flashes for a while.

Listening to a preset station

- 1 BAND button is pressed, with arrows indicating the selection of FM1, FM2, or FM3, and AM.

- 2 Select the preset station (1 – 6) you want.



To check the other information while listening to an FM or AM station

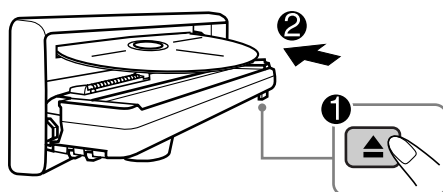


Clock → Station name* → Frequency →
(back to the beginning)

* If no title is assigned to a station, "NO NAME" appears. To assign a title to a station, see page 15.

Disc operations

Playing a disc in the unit



All tracks will be played repeatedly until you change the source or eject the disc.

To stop play and eject the disc

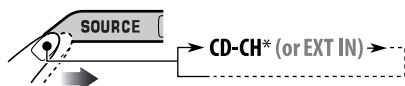


Playing discs in the CD changer

All discs in the magazine will be played repeatedly until you change the source.

- Ejecting the magazine will also stop playing.

1



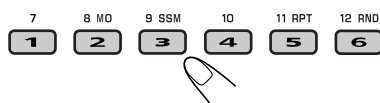
* If you have changed "EXT IN" setting to "EXT IN" (see page 14), you cannot select the CD changer.

See page 16 when using an iPod or JVC D. player.

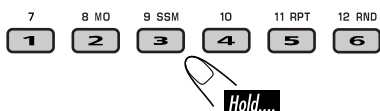
2

Select a disc.

For disc number from 01 – 06:



For disc number from 07 – 12:



About MP3 and WMA discs

MP3 and WMA "tracks" (words "file" and "track" are used interchangeably) are recorded in "folders."

About the CD changer

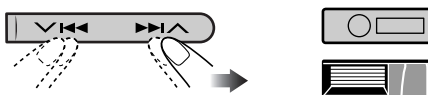
It is recommended to use a JVC MP3-compatible CD changer with your unit.

- You can also connect other CH-X series CD changers (except CH-X99 and CH-X100). These units are not compatible with MP3 discs.
- You cannot play any WMA disc in the CD changer.
- You cannot use the KD-MK series CD changers with this unit.
- Disc text information recorded in the CD Text can be displayed when a JVC CD Text compatible CD changer is connected.
- For connection, see Installation/Connection Manual (separate volume).

To fast-forward or reverse the track



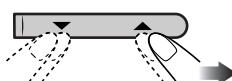
To go to the next or previous tracks



To go to the next or previous folders (only for MP3 or WMA discs)

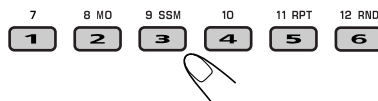
For MP3 discs:

For WMA discs:

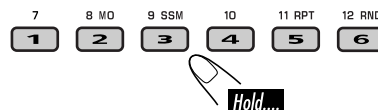


To locate a particular track (for CD) or folder (for MP3 or WMA discs) directly

To select a number from 01 – 06:

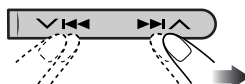


To select a number from 07 – 12:



- To use folder search on MP3/WMA discs, it is required that folders are assigned with 2-digit numbers at the beginning of their folder names—01, 02, 03, and so on.

- To select a particular track in a folder (for MP3 or WMA disc):



Other main functions

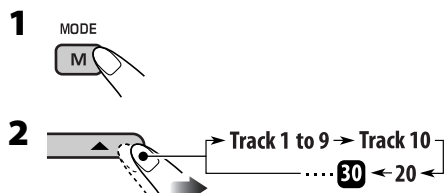
■ Skipping a track quickly during play



**Only possible on JVC
MP3-compatible CD changer**

- For MP3 or WMA disc, you can skip a track within the same folder.

Ex.: To select track 32 while playing a track whose number is a single digit (1 to 9)



Each time you press the button, you can skip 10 tracks.

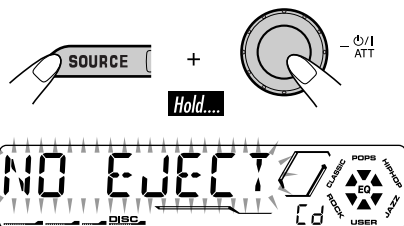
- After the last track, the first track will be selected and vice versa.



■ Prohibiting disc ejection



You can lock a disc in the loading slot.



To cancel the prohibition, repeat the same procedure.



Changing the display information

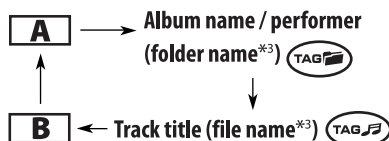


■ While playing an audio CD or a CD Text

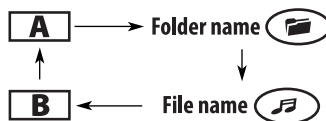


■ While playing an MP3 or a WMA*2 disc

- When "TAG DISP" is set to "TAG ON" (see page 14)



- When "TAG DISP" is set to "TAG OFF"



- A** : Clock with the current track number
- B** : Elapsed playing time with the current track number

*1 If the current disc is an audio CD, "NO NAME" appears.

*2 Only for the built-in CD player.

*3 If an MP3/WMA file does not have ID3 tags, folder name and file name appear. In this case, the TAG indicator will not light up.

Selecting the playback modes

You can use only one of the following playback modes at a time.



2 Select your desired playback mode.

Repeat play



Mode	Plays repeatedly
TRK RPT	: The current track.
FLDR RPT *1	: All tracks of the current folder.
DISC RPT *2	: All tracks of the current disc.
RPT OFF	: Cancels.

Random play



Mode	Plays at random
FLDR RND *1	: All tracks of the current folder, then tracks of the next folder and so on.
DISC RND	: All tracks of the current disc.
MAG RND *2	: All tracks of the inserted discs.
RND OFF	: Cancels.

*1 Only while playing an MP3 or a WMA disc.

*2 Only while playing discs in the CD changer.

Sound adjustments

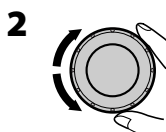
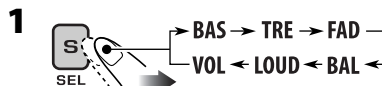
You can select a preset sound mode suitable to the music genre (C-EQ: custom equalizer).



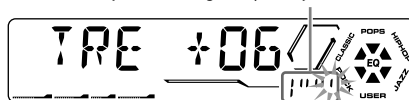
Preset values	BAS (bass)	TRE (treble)	LOUD (loudness)
USER (Flat sound)	00	00	OFF
ROCK (Rock or disco music)	+03	+01	ON
CLASSIC (Classical music)	+01	-02	OFF
POPS (Light music)	+04	+01	OFF
HIP HOP (Funk or rap music)	+02	00	ON
JAZZ (Jazz music)	+02	+03	OFF

Adjusting the sound

You can adjust the sound characteristics to your preference.



Indication pattern changes as you adjust the level.



Ex.: When "TRE" is selected

To be continued...

Indication [Range]

BAS*¹ (bass)

Adjust the bass. [-06 to +06]

TRE*¹ (treble)

Adjust the treble. [-06 to +06]

FAD*² (fader)

Adjust the front and rear speaker balance.
[R06 to F06]

BAL (balance)

Adjust the left and right speaker balance.
[L06 to R06]

LOUD*¹ (loudness)

Boost low and high frequencies to produce a well-balanced sound at low volume level.
[LOUD ON or LOUD OFF]

VOL (volume)

Adjust the volume. [00 to 30 or 50*³]

*¹ When you adjust the bass, treble, or loudness, the adjustment you have made is stored for the currently selected sound mode (C-EQ) including "USER."

*² If you are using a two-speaker system, set the fader level to "00."

*³ Depending on the amplifier gain control setting. (See page 14 for details.)

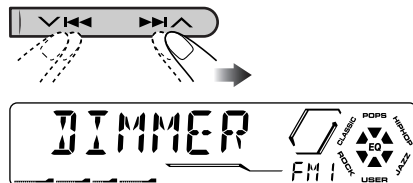
General settings — PSM

You can change PSM (Preferred Setting Mode) items listed (except "SID") in the table that follows.

1

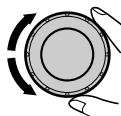


2 Select a PSM item.



Ex.: When you select "DIMMER"

3 Adjust the PSM item selected.



4 Repeat steps 2 and 3 to adjust other PSM items if necessary.

5 Finish the procedure.



Indications	Selectable settings, [reference page]
DEMO Display demonstration	DEMO ON : [Initial]; Display demonstration will be activated automatically if no operation is done for about 20 seconds, [7]. DEMO OFF : Cancels.
CLOCK H Hour adjustment	1 – 12, [7] [Initial: 1 (1:00)]
CLOCK M Minute adjustment	00 – 59, [7] [Initial: 00 (1:00)]
CLK ADJ *1 Clock adjustment	AUTO : [Initial]; The built-in clock is automatically adjusted using the clock data provided via the satellite radio channel. OFF : Cancels.
T-ZONE *1, *2 Time zone	Select your residential area from one of the following time zone for clock adjustment. EASTERN [Initial] ⇄ ATLANTIC ⇄ NEWFOUND ⇄ ALASKA ⇄ PACIFIC ⇄ MOUNTAIN ⇄ CENTRAL ⇄ (back to the beginning)
DST *1, *2 Daylight savings time	Activates this if your residential area is subject to DST. ON : [Initial]; Activates daylight savings time. OFF : Cancels.
SID *3 SIRIUS ID	The 12-digit SIRIUS identification number scrolls on the display 5 seconds after “SID” is selected, [17]. • Press S SEL to resume the previous display.
LEVEL Audio level meter	ON : [Initial]; Activates the audio level indicator. OFF : Cancels; sound mode indicator is shown.
DIMMER Dimmer	AUTO : [Initial]; Dims the display when you turn on the headlights. ON : Activates dimmer. OFF : Cancels.
TEL *4 Telephone muting	MUTING 1/MUTING 2 : Select either one which mutes the sounds while using the cellular phone. OFF : [Initial]; Cancels.

*1 Displayed only when SIRIUS Satellite radio or XM Satellite radio is connected.

*2 Displayed only when “CLK ADJ” is set to “AUTO.”

*3 Displayed only when SIRIUS Satellite radio is connected.

*4 Only for KD-AR470.

Indications	Selectable settings, [reference page]
SCROLL *1 Scroll	ONCE : [Initial]; Scrolls the disc information once. AUTO : Repeats scrolling (5-second intervals in between). OFF : Cancels. • Pressing D DISP for more than one second can scroll the display regardless of the setting.
EXT IN *2 External input	CHANGER : [Initial]; To use a JVC CD changer, [9], an Apple iPod or a JVC D. player, [16], a JVC compatible satellite (SIRIUS/XM) tuner, [17]. EXT IN : To use any other component than the above, [16].
AUX ADJ Auxiliary input level adjustment	A.ADJ 00 – A.ADJ 05 : Adjust the auxiliary input level accordingly, to avoid the sudden increase of the output level when changing the source from the external component connected to the AUX input jack on the control panel. [Initial: A.ADJ 00]
TAG DISP Tag display	TAG ON : [Initial]; Shows the ID3 tag while playing MP3/WMA tracks, [10]. TAG OFF : Cancels.
AMP GAIN Amplifier gain control	You can change the maximum volume level of this unit. LOW PWR : VOL 00 – VOL 30 (Select this if the maximum power of the speaker is less than 50 W to prevent them from damaging the speaker.) HIGH PWR : [Initial]; VOL 00 – VOL 50
AREA Tuner channel interval	AREA US : [Initial]; Select this when using the unit in North or South America, except for Middle South America. (FM: 200 kHz; AM: 10 kHz) AREA EU : Select this when using the unit in any other area than North, Middle South, and South America. (FM: 50 kHz—manual tuning, 100 kHz—auto search; AM: 9 kHz) AREA SA : Select this when using the unit in Middle South America. (FM: 100 kHz; AM: 10 kHz)

*1 Some characters or symbols will not be shown correctly (or will be blanked) on the display.

*2 Displayed only when one of the following sources is selected—FM, AM, CD, or AUX IN.

Title assignment

You can assign titles to station frequencies and CDs (both in this unit and in the CD changer).

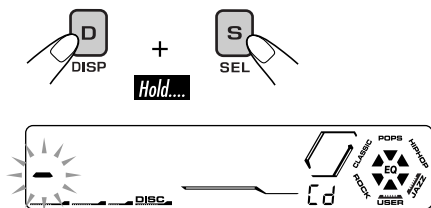
Sources	Maximum number of characters
FM/AM tuner	Up to 8 characters (up to 30 station frequencies including both FM and AM)
CDs/CD-CH	Up to 32 characters (up to 30 discs)

- You cannot assign a title to a CD Text or an MP3/WMA disc.

1 Select the sources.

- For FM/AM tuner: Tune into a station.
- For a CD in this unit: Insert a CD.
- For CDs in the CD changer: Select "CD-CH," then select a disc number.

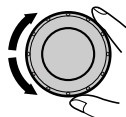
2 Enter the title assignment mode.



Ex.: When you select "CD" as the source

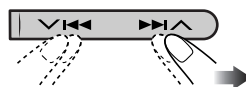
3 Assign a title.

1 Select a character.



A	B	C	D	E	F	G	H	I	J	K	L	M	N
O	P	Q	R	S	T	U	V	W	X	Y	Z	0	1
2	3	4	5	6	7	8	9	-	/	<	>	space	

2 Move to the next (or previous) character position.



3 Repeat steps 1 and 2 until you finish entering the title.

4 Finish the procedure.



To erase the entire title

In step 2 on the left...



This unit is ready for operating an Apple iPod® or a JVC D. player from the control panel.

- For details, refer also to the manual supplied with the interface adapter for iPod®—KS-PD100 or D. player—KS-PD500.

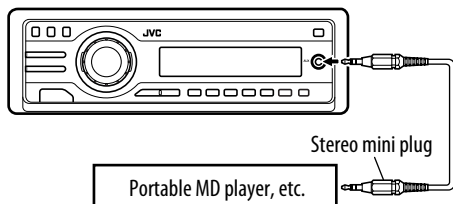
External component operations

You can connect an external component to...

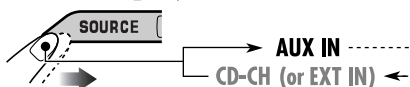
- CD changer jack on the rear using:
 - **Line Input Adapter**—KS-U57 (not supplied) or **AUX Input Adapter**—KS-U58 (not supplied) for any other components (except iPod and D. player).
 - **Interface adapter for iPod®**—KS-PD100 (not supplied) for controlling iPod.
 - **D. player interface adapter**—KS-PD500 (not supplied) for controlling D. player.
- AUX (auxiliary) input jack on the control panel.

For connection, see Installation/Connection Manual (separate volume).

Connecting an external component to the AUX input jack

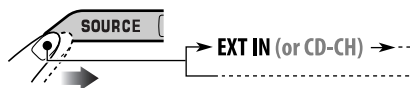


- 1 For selecting the external component connected to...
 - **AUX input jack**

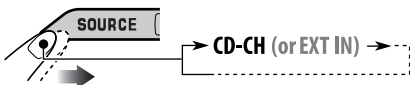


- **CD changer jack on the rear using KS-U57 or KS-U58**

If "EXT IN" does not appear, see page 14 and select the external input ("EXT IN").

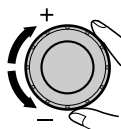


- **CD changer jack on the rear using interface adapter for iPod—KS-PD100 or for D. player—KS-PD500**



- 2 Turn on the connected component and start playing the source.

- 3 Adjust the volume.



- 4 Adjust the sound as you want. (See pages 11 and 12.)

To check the other information while listening to an external component



Clock ↔ AUX IN, EXT IN, or CD-CH*

* See "While playing an MP3 or WMA disc" on page 10 for details.

Satellite radio operations

This unit is Satellite (SAT) Radio Ready—compatible with both SIRIUS Satellite radio and XM Satellite radio.

Before operating your satellite radio:

- For connection, see Installation/Connection Manual (separate volume).
- Refer also to the Instructions supplied with your SIRIUS Satellite radio or XM Satellite radio.
- “SIRIUS” and the SIRIUS dog logo are registered trademarks of SIRIUS Satellite Radio Inc.
- XM and its corresponding logos are registered trademarks of XM Satellite Radio Inc.
- “SAT Radio,” the SAT Radio logo and all related marks are trademarks of SIRIUS Satellite Radio Inc., and XM Satellite Radio, Inc.

Listening to the satellite radio

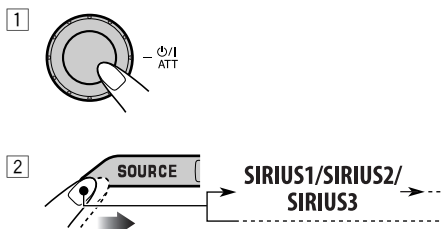
Connect either one of the following (separately purchased) to the CD changer jack on the rear of this unit.

- **JVC SIRIUS radio DLP**—Down Link Processor, for listening to the SIRIUS Satellite radio.
- **XMDirect™ Universal Tuner Box using a JVC Smart Digital Adapter**—XMDJVC100 (not supplied), for listening to the XM Satellite radio.

GCI (Global Control Information) update:

- If channels are updated after subscription, updating starts automatically. “UPDATING” flashes and no sound can be heard.
- Update takes a few minutes to complete.
- During update, you cannot operate your satellite radio.

Activate your SIRIUS subscription after connection:



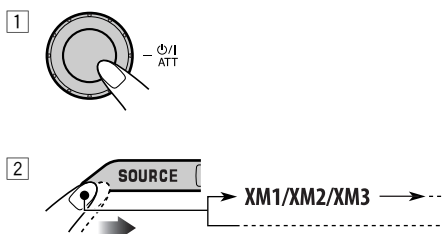
JVC DLP starts updating all the SIRIUS channels.

Once completed, JVC DLP tunes in to the preset channel, CH184.

- 3 **Check your SIRIUS ID, see page 13.**
- 4 **Contact SIRIUS on the internet at <http://activate.siriusradio.com/> to activate your subscription, or you can call SIRIUS toll-free at 1-888-539-SIRIUS (7474).**
“SUB UPDT PRESS ANY KEY” scrolls on the display once subscription has been completed.

Activate your XM subscription after connection:

- Only Channel 0, 1, and 247 are available before activation.



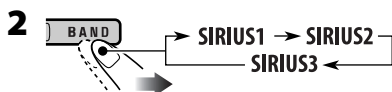
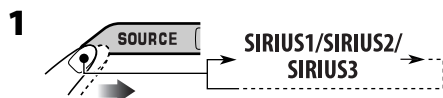
XMDirect™ Universal Tuner Box starts updating all the XM channels. “Channel 1” is tuned in automatically.

To be continued...

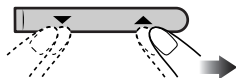
- 3 Check your XM Satellite radio ID labelled on the casing of the XMDirect™ Universal Tuner Box, or tune into “Channel 0” (see page 19).

- 4 Contact XM Satellite radio on the internet at <<http://xmradio.com/activation/>> to activate your subscription, or you can call 1-800-XM-RADIO (1-800-967-2346). Once completed, the unit tunes in to one of the available channels (Channel 4 or higher).

Listening to the SIRIUS Satellite radio



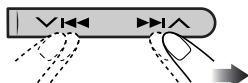
- 3 Select a category.



You can tune in to all the channels of every category by selecting “ALL.”

Selecting a particular category (SPORTS, ENTERTAINMENT, etc.) allows you to enjoy only the channels from the selected category.

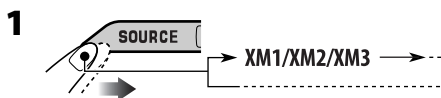
- 4 Select a channel for listening.



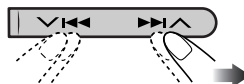
Holding the button changes the channels rapidly.

- When changing the category or channel, invalid and unsubscribed channels are skipped.

Listening to the XM Satellite radio



- 3 Select a channel for listening.



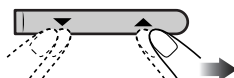
Holding the button changes the channels rapidly.

Category/channel search

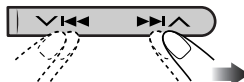
You can search for programs by category (Category Search) or channel number (Channel Search).

- In Category Search,** you can tune in to the channels of the selected category. Category Search begins from the currently selected channel. The selected channel number flashes on the display.
- In Channel Search,** you can tune in to all channels (including non-categorised channels).

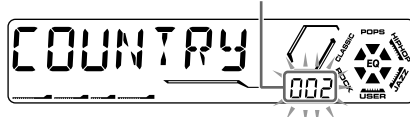
- 1 Select a category (Category Search).



- 2 Select a channel for listening.



Current channel number



Ex.: When you select “COUNTRY” for Category Search

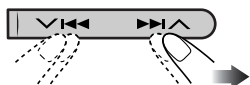
If no operation is done for about 15 seconds, Category Search is canceled.

In Channel Search, channel name and channel number appear on the display during search.

- While searching, invalid and unsubscribed channels are skipped.

Checking the XM Satellite radio ID

While selecting “XM1,” “XM2,” or “XM3,” select “Channel 0.”



The display alternately shows “RADIO ID” and the 8-digit (alphanumeric) ID number.

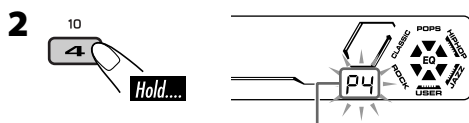
To cancel the ID number display, select any channel other than “Channel 0.”

Storing channels in memory

You can preset six channels for each band.

Ex.: Storing a channel into preset number 4.

1 Tune in to a channel you want.



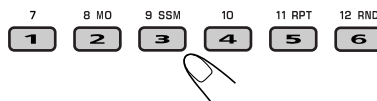
Preset number flashes for a while.

Listening to a preset channel

1 Select either SIRIUS Satellite radio or XM Satellite radio.



2 Select the preset channel (1 – 6) you want.



To change the display information while listening to a channel



Clock → Category name → Channel name → Artist name → Composer name* → Song/program name/title → (back to the beginning)

* Only for SIRIUS Satellite radio.

More about this unit

Basic operations

Turning on the power

- By pressing SOURCE on the unit, you can also turn on the power. If the source is ready, playback also starts.

Turning off the power

- If you turn off the power while listening to a disc, disc play will start from where playback has been stopped previously, next time you turn on the power.

Selecting the sources

- When no disc is loaded in the unit, “CD” cannot be selected.
- “SIRIUS,” “XM,” or “CD-CH” cannot be selected when the target component is not connected.

Tuner operations

Storing stations in memory

- During SSM search...
 - All previously stored stations are erased and stations are stored newly.
 - Received stations are preset in No. 1 (lowest frequency) to No. 6 (highest frequency).
 - When SSM is over, the station stored in No. 1 will be automatically tuned in.
- When storing a station manually, a previously preset station is erased when a new station is stored in the same preset number.

Disc operations

Caution for DualDisc playback

- The Non-DVD side of a “DualDisc” does not comply with the “Compact Disc Digital Audio” standard. Therefore, the use of Non-DVD side of a DualDisc on this product may not be recommended.

General

- This unit has been designed to reproduce CDs/CD Texts, and CD-Rs (Recordable)/CD-RWs (Rewritable) in audio CD (CD-DA), MP3 and WMA formats.
- When a disc has been loaded, selecting “CD” for the playback source starts disc play.

Inserting a disc

- When a disc is inserted upside down, “PLEASE” and “EJECT” appear alternately on the display. Press  to eject the disc.
- Do not insert 8 cm discs (single CD) and unusual shape discs (heart, flower, etc.) into the loading slot.

Playing a disc

- While fast-forwarding or reversing on an MP3 or WMA disc, you can only hear intermittent sounds.

Playing a CD-R or CD-RW

- Use only “finalized” CD-Rs or CD-RWs.
- This unit can play back only the files of the same type which is first detected if a disc includes both audio CD (CD-DA) files and MP3/WMA files.
- This unit can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- Some CD-Rs or CD-RWs may not play back on this unit because of their disc characteristics, and for the following causes:
 - Discs are dirty or scratched.
 - Moisture condensation occurs on the lens inside the unit.
 - The pickup lens inside the unit is dirty.
 - CD-R/CD-RW on which the files are written with “Packet Write” method.
 - There are improper recording conditions (missing data, etc.) or media conditions (stain, scratch, warp, etc.).
- CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.

- Do not use the following CD-Rs or CD-RWs:
 - Discs with stickers, labels, or protective seal stuck to the surface.
 - Discs on which labels can be directly printed by an ink jet printer.
- Using these discs under high temperatures or high humidities may cause malfunctions or damages to the unit.

Playing an MP3/WMA disc

- This unit can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).
 - This unit can show the names of albums, artists (performer), and ID3 Tag (Version 1.0, 1.1, 2.2, 2.3, or 2.4) for MP3 files and for WMA files.
 - This unit can display only one-byte characters. No other characters can be correctly displayed.
 - This unit can play back MP3/WMA files meeting the conditions below:
 - Bit rate: 8 kbps — 320 kbps
 - Sampling frequency:
 - 48 kHz, 44.1 kHz, 32 kHz (for MPEG-1)
 - 24 kHz, 22.05 kHz, 16 kHz (for MPEG-2)
 - Disc format: ISO 9660 Level 1/ Level 2, Romeo, Joliet, Windows long file name
 - The maximum number of characters for file/folder names vary among the disc format used (includes 4 extension characters—<.mp3> or <.wma>).
 - ISO 9660 Level 1: up to 12 characters
 - ISO 9660 Level 2: up to 31 characters
 - Romeo*: up to 128 (72) characters
 - Joliet*: up to 64 (36) characters
 - Windows long file name*: up to 128 (72) characters
- * The parenthetic figure is the maximum number of characters for file/folder names in case the total number of files and folders is 313 or more.*
- This unit can play back the files recorded in VBR (variable bit rate).
The files recorded in VBR have a discrepancy in elapsed time display, and do not show the actual elapsed time. Especially, after performing the search function, this difference becomes noticeable.

- This unit can recognize the total of 512 files, of 200 folders, and of 8 hierarchies.
- This unit cannot play back the following files:
 - MP3 files encoded with MP3i and MP3 PRO format.
 - MP3 files encoded in an unappropriated format.
 - MP3 files encoded with Layer 1/2.
 - WMA files encoded with lossless, professional, and voice format.
 - WMA files which are not based upon Windows Media® Audio.
 - WMA files copy-protected with DRM.
 - Files which have the data such as WAVE, ATRAC3, etc.
- The search function works but search speed is not constant.

Changing the source

- If you change the source, playback also stops (without ejecting the disc).
Next time you select “CD” for the playback source, disc play starts from where it has been stopped previously.

Ejecting a disc

- If the ejected disc is not removed within 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust. (Disc will not play this time.)

General settings—PSM

- If you change the “AMP GAIN” setting from “HIGH PWR” to “LOW PWR” while the volume level is set higher than “VOL 30,” the unit automatically changes the volume level to “VOL 30.”

Other main functions

- If you try to assign a title to a 31st disc or to a 31st station frequency, “NAMEFULL” flashes on the display. Delete unwanted titles before assignment.
- Titles assigned to discs in the CD changer can also be shown if you play back the disc from the unit.

To be continued....

Satellite radio operations

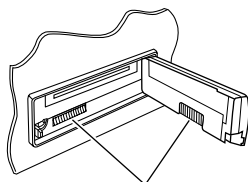
- You can also connect the JVC SIRIUS radio PnP (Plug and Play), using the JVC SIRIUS radio adapter, KS-U100K (not supplied) to the CD changer jack on the rear. By turning on/off the power of the unit, you can turn on/off the JVC PnP. However, you cannot control it from this unit.
- To know more about SIRIUS Satellite radio or to sign up, visit «<http://www.sirius.com>».
- For the latest channel listings and programming information, or to sign up for XM Satellite radio, visit «<http://www.xmradio.com>».

Maintenance

How to clean the connectors

Frequent detachment will deteriorate the connectors.

To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.



Connector

Moisture condensation

Moisture may condense on the lens inside the CD player in the following cases:

- After starting the heater in the car.
- If it becomes very humid inside the car.

Should this occur, the CD player may malfunction. In this case, eject the disc and leave the unit turned on for a few hours until the moisture evaporates.

How to handle discs

When removing a disc from its case, press down the center holder of the case and lift the disc out, holding it by the edges.

Center holder



- Always hold the disc by the edges. Do not touch its recording surface.

When storing a disc into its case, gently insert the disc around the center holder (with the printed surface facing up).

- Make sure to store discs into the cases after use.

To keep discs clean

A dirty disc may not play correctly. If a disc does become dirty, wipe it with a soft cloth in a straight line from center to edge.



- Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzene, etc.) to clean discs.

To play new discs

New discs may have some rough spots around the inner and outer edges. If such a disc is used, this unit may reject the disc.



To remove these rough spots, rub the edges with a pencil or ball-point pen, etc.

Do not use the following discs:

Warped disc



Sticker



Sticker residue

Disc



Stick-on label

Troubleshooting

What appears to be trouble is not always serious. Check the following points before calling a service center.

	Symptoms	Remedies/Causes
General	Sound cannot be heard from the speakers.	- Adjust the volume to the optimum level. - Check the cords and connections.
	The unit does not work at all.	Reset the unit (see page 2).
FM/AM	SSM automatic presetting does not work.	Store stations manually.
	Static noise while listening to the radio.	Connect the antenna firmly.
Disc playback	Disc cannot be played back.	Insert the disc correctly.
	- CD-R/CD-RW cannot be played back. - Tracks on the CD-R/CD-RW cannot be skipped.	- Insert a finalized CD-R/CD-RW. - Finalize the CD-R/CD-RW with the component which you used for recording.
	Disc can be neither played back nor ejected.	- Unlock the disc (see page 10). - Eject the disc forcibly (see page 2).
	Disc sound is sometimes interrupted.	- Stop playback while driving on rough roads. - Change the disc. - Check the cords and connections.
MP3/WMA playback	Disc cannot be played back.	- Use a disc with MP3/WMA tracks recorded in the format compliant with ISO 9660 Level 1, Level 2, Romeo, or Joliet. - Add the extension code <.mp3> or <.wma> to the file names.
	Noise is generated.	Skip to another track or change the disc. (Do not add the extension code <.mp3> or <.wma> to non-MP3 or WMA tracks.)
	A longer readout time is required ("CHECK" keeps flashing on the display).	Do not use too many hierarchies and folders.
	Tracks do not play back in the order you have intended them to play.	Playback order is determined when the files are recorded.
	Elapsed playing time is not correct.	This sometimes occurs during play. This is caused by how the tracks are recorded on the disc.
	"NO FILES" appears on the display.	Insert a disc that contains MP3/WMA tracks.
	Correct characters are not displayed (e.g. album name).	This unit can only display alphabets (upper case), numbers, and a limited number of symbols.

To be continued...

	Symptoms	Remedies/Causes
CD changer	• “NO DISC” appears on the display.	Insert a disc into the magazine.
	• “NO MAG” appears on the display.	Insert the magazine.
	• “RESET 8” appears on the display.	Connect this unit and the CD changer correctly and press the reset button of the CD changer.
	• “RESET 1” – “RESET 7” appears on the display.	Press the reset button of the CD changer.
	• The CD changer does not work at all.	Reset the unit (see page 2).
Satellite radio	• “CALL 1-888-539-SIRIUS TO SUBSCRIBE” scrolls on the display while listening to the SIRIUS Satellite radio.	Starts subscribing SIRIUS Satellite radio (see page 17).
	• No sound can be heard. “UPDATING” appears on the display.	The unit is updating the channel information and it takes a few minutes to complete.
	• Either “NO SIGNAL” scrolls or “NO SIGNAL” appears on the display.	Move to an area where signals are stronger.
	• Either “NO ANTENNA” scrolls or “ANTENNA” appears on the display.	Connect the antenna firmly.
	• “NO CH” appears on the display for about 5 seconds, then returns to the previous display while listening to the SIRIUS Satellite radio.	No broadcast on the selected channel. Select another channel or continue listening to the previous channel.
	• “NO (information)*” scrolls on the display while listening to the SIRIUS Satellite radio. • “---” appears on the display while listening to the XM Satellite radio.	No text information for the selected channel.
	• “---” appears on the display for about 2 seconds, then returns to the previous channel while listening to the XM Satellite radio.	Selected channel is no longer available or unauthorized. Select another channel or continue listening to the previous channel.
	• “OFF AIR” appears on the display while listening to the XM Satellite radio.	Selected channel is not broadcasting at this time. Select another channel or continue listening to the previous channel.
	• “LOADING” appears on the display while listening to the XM Satellite radio.	The unit is loading the channel information and audio. Text information are temporary unavailable.
	• “RESET 8” appears on the display. • Satellite radio does not work at all.	Reconnect this unit and the satellite radio correctly and press the reset button of this unit.

* NO CATEGORY, NO ARTIST, NO COMPOSER, and NO SONG/PROGRAM

AUDIO AMPLIFIER SECTION

Power Output:

20 W RMS $\times$ 4 Channels at 4 Ω
and $\leq$ 1% THD+N

Signal to Noise Ratio:

80 dBa (reference: 1 W into 4 Ω)



Load Impedance: 4 Ω (4 Ω to 8 Ω allowance)

Tone Control Range:

Bass: $\pm$ 10 dB at 100 Hz

Treble: $\pm$ 10 dB at 10 kHz

Frequency Response: 40 Hz to 20 000 Hz

Line-Out Level/Impedance:

KD-AR470: 4.0 V/20 k Ω load (full scale)

KD-G420: 2.5 V/20 k Ω load (full scale)

Output Impedance: 1 k Ω

Other Terminals: CD changer

AUX (auxiliary) input jack

TUNER SECTION

Frequency Range:

FM: 87.5 MHz to 107.9 MHz

(with channel interval set to 100 kHz
or 200 kHz)

87.5 MHz to 108.0 MHz

(with channel interval set to 50 kHz)

AM: 530 kHz to 1 710 kHz

(with channel interval set to 10 kHz)

531 kHz to 1 602 kHz

(with channel interval set to 9 kHz)

[FM Tuner]

Usable Sensitivity: 11.3 dBf (1.0 μ V/75 Ω)

50 dB Quieting Sensitivity:

16.3 dBf (1.8 μ V/75 Ω)

Alternate Channel Selectivity (400 kHz): 65 dB

Frequency Response: 40 Hz to 15 000 Hz

Stereo Separation: 35 dB

Capture Ratio: 1.5 dB

[AM Tuner]

Sensitivity: 20 μ V

Selectivity: 35 dB

CD PLAYER SECTION

Type: Compact disc player

Signal Detection System: Non-contact optical
pickup (semiconductor laser)

Number of Channels: 2 channels (stereo)

Frequency Response: 5 Hz to 20 000 Hz

Dynamic Range: 96 dB

Signal-to-Noise Ratio: 98 dB

Wow and Flutter: Less than measurable limit

MP3 Decoding Format:

MPEG1/2 Audio Layer 3

Max. Bit Rate: 320 kbps

WMA (Windows Media® Audio) Decoding
Format:

Max. Bit Rate: 192 kbps

GENERAL

Power Requirement:

Operating Voltage:

DC 14.4 V (11 V to 16 V allowance)

Grounding System: Negative ground

Allowable Operating Temperature:

0°C to +40°C (32°F to 104°F)

Dimensions (W $\times$ H $\times$ D):

Installation Size (approx.):

182 mm $\times$ 52 mm $\times$ 150 mm

(7-3/16" $\times$ 2-1/16" $\times$ 5-15/16")

Panel Size (approx.):

188 mm $\times$ 58 mm $\times$ 11 mm

(7-7/16" $\times$ 2-5/16" $\times$ 7/16")

Mass (approx.):

1.5 kg (3.3 lbs) (excluding accessories)

*Design and specifications are subject to change
without notice.*

If a kit is necessary for your car, consult your
telephone directory for the nearest car audio
specialty shop.

- Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.



Having TROUBLE with operation?
Please reset your unit
Refer to page of How to reset your unit
Still having trouble??

USA ONLY

Call 1-800-252-5722

<http://www.jvc.com>

We can help you!

JVC



EN, SP, FR

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1005DTSMDTJEIN

JVC

KD-AR470/KD-G420

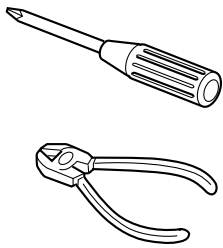
Installation/Connection Manual

Manual de instalación/conexión

Manuel d'installation/raccordement

GET0336-002A

[J]



1005DTSMDTJEIN

EN, SP,FR

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ENGLISH

This unit is designed to operate on **12 V DC, NEGATIVE ground electrical systems**. If your vehicle does not have this system, a voltage inverter is required, which can be purchased at JVC car audio dealers.

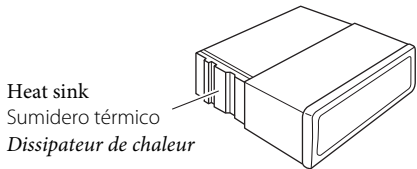
WARNINGS

To prevent short circuits, we recommend that you disconnect the battery's negative terminal and make all electrical connections before installing the unit.

- **Be sure to ground this unit to the car's chassis again after installation.**

Notes:

- Replace the fuse with one of the specified rating. If the fuse blows frequently, consult your JVC car audio dealer.
- It is recommended to connect to the speakers with maximum power of more than 50 W (both at the rear and at the front, with an impedance of **4 Ω to 8 Ω**). If the maximum power is less than 50 W, change "AMP GAIN" setting to prevent the speakers from being damaged (see page 14 of the INSTRUCTIONS).
- To prevent short-circuit, cover the terminals of the UNUSED leads with insulating tape.
- The heat sink becomes very hot after use. Be careful not to touch it when removing this unit.



ESPAÑOL

Esta unidad está diseñada para funcionar con **12 V de CC, con sistemas eléctricos de masa NEGATIVA**. Si su vehículo no posee este sistema, será necesario un inversor de tensión, que puede ser adquirido en los concesionarios de JVC de equipos de audio para automóviles.

ADVERTENCIAS

Para evitar cortocircuitos, recomendamos que desconecte el terminal negativo de la batería y que efectúe todas las conexiones eléctricas antes de instalar la unidad.

- **Asegúrese de volver a conectar a masa esta unidad al chasis del automóvil después de la instalación.**

Notas:

- Reemplace el fusible por uno con la corriente especificada. Si el fusible se quemase frecuentemente consulte con su concesionario de JVC de equipos de audio para automóviles.
- Se recomienda conectar los altavoces con una potencia máxima de más de 50 W (tanto atrás como adelante, con una impedancia de **4 Ω a 8 Ω**). Si la potencia máxima es de menos de 50 W, cambie "AMP GAIN" para evitar daños en los altavoces (consulte la página 14 del MANUAL DE INSTRUCCIONES).
- Para evitar cortocircuitos, cubra los cables NO UTILIZADOS con cinta aislante.
- El sumidero térmico estará muy caliente después del uso. Asegúrese de no tocarlo al desmontar esta unidad.

FRANÇAIS

Cet appareil est conçu pour fonctionner sur des sources de **courant continu de 12 V à masse NEGATIVE**. Si votre véhicule n'offre pas ce type d'alimentation, il vous faut un convertisseur de tension, que vous pouvez acheter chez un revendeur d'autoradios JVC.

AVERTISSEMENTS

Pour éviter tout court-circuit, nous vous recommandons de débrancher la borne négative de la batterie et d'effectuer tous les raccordements électriques avant d'installer l'appareil.

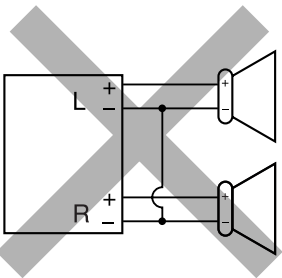
- **Assurez-vous de raccorder de nouveau la mise à la masse de cet appareil au châssis de la voiture après l'installation.**

Remarques:

- Remplacer le fusible par un de la valeur précisée. Si le fusible saute souvent, consulter votre revendeur d'autoradios JVC.
- Il est recommandé de connecter des enceintes avec une puissance de plus de 50 W (les enceintes arrière et les enceintes avant, avec une impédance comprise entre **4 Ω et 8 Ω**). Si la puissance maximum est inférieure à 50 W, changez "AMP GAIN" pour éviter d'endommager vos enceintes (voir page 14 du MANUAL D'INSTRUCTIONS).
- Pour éviter les court-circuits, couvrir les bornes des fils qui ne sont PAS UTILISÉS avec de la bande isolante.
- Le dissipateur de chaleur devient très chaud après usage. Faire attention de ne pas le toucher en retirant cet appareil.

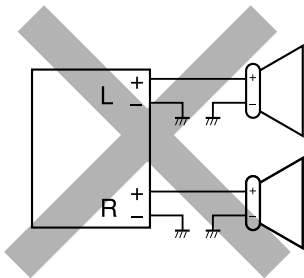
PRECAUTIONS on power supply and speaker connections:

- **DO NOT connect the speaker leads of the power cord to the car battery; otherwise, the unit will be seriously damaged.**
- BEFORE connecting the speaker leads of the power cord to the speakers, check the speaker wiring in your car.



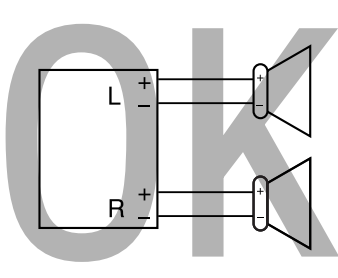
PRECAUCIONES sobre las conexiones de la fuente de alimentación y de los altavoces:

- **NO conecte los conductores de altavoz del cable de alimentación a la batería de automóvil, pues podrían producirse graves daños en la unidad.**
- ANTES de conectar a los altavoces los conductores de altavoz del cable de alimentación, verifique el conexionado de altavoz de su automóvil.



PRECAUTIONS sur l'alimentation et la connexion des enceintes:

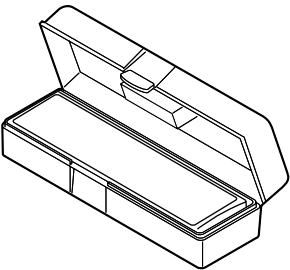
- **NE CONNECTEZ PAS les fils d'enceintes du cordon d'alimentation à la batterie; sinon, l'appareil serait sérieusement endommagé.**
- AVANT de connecter les fils d'enceintes du cordon d'alimentation aux enceintes, vérifiez le câblage des enceintes de votre voiture.



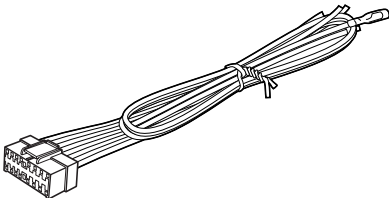
Parts list for installation and connection

The following parts are provided for this unit. After checking them, please set them correctly.

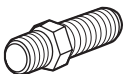
- (A) / (B)
- Hard case/Control panel
- Estuche duro/Panel de control
- Etui de transport/Panneau de commande



- (E)
- Power cord
- Cordón de alimentación
- Cordon d'alimentation



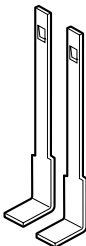
- (H)
- Mounting bolt—M5 × 20 mm (M5 × 13/16")
- Perno de montaje—M5 × 20 mm (M5 × 13/16 pulgada)
- Boulon de montage—M5 × 20 mm (M5 × 13/16 pouces)



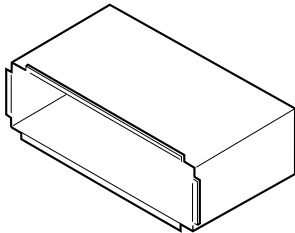
- (I)
- Rubber cushion
- Cojín de goma
- Amortisseur en caoutchouc



- (J)
- Handles
- Manijas
- Poignées



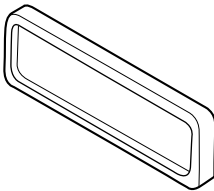
- (C)
- Sleeve
- Cubierta
- Manchon



- (F)
- Washer (ø5)
- Arandela (ø5)
- Rondelle (ø5)



- (D)
- Trim plate
- Placa de guarnición
- Plaque d'assemblage

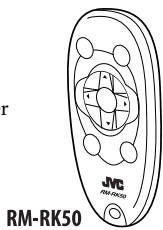


- (G)
- Lock nut (M5)
- Tuerca de seguridad (M5)
- Ecrou d'arrêt (M5)



Only for KD-AR470 / Sólo para KD-AR470 / Seulement pour le KD-AR470

- (K)
- Remote controller
- Control remoto
- Télécommande



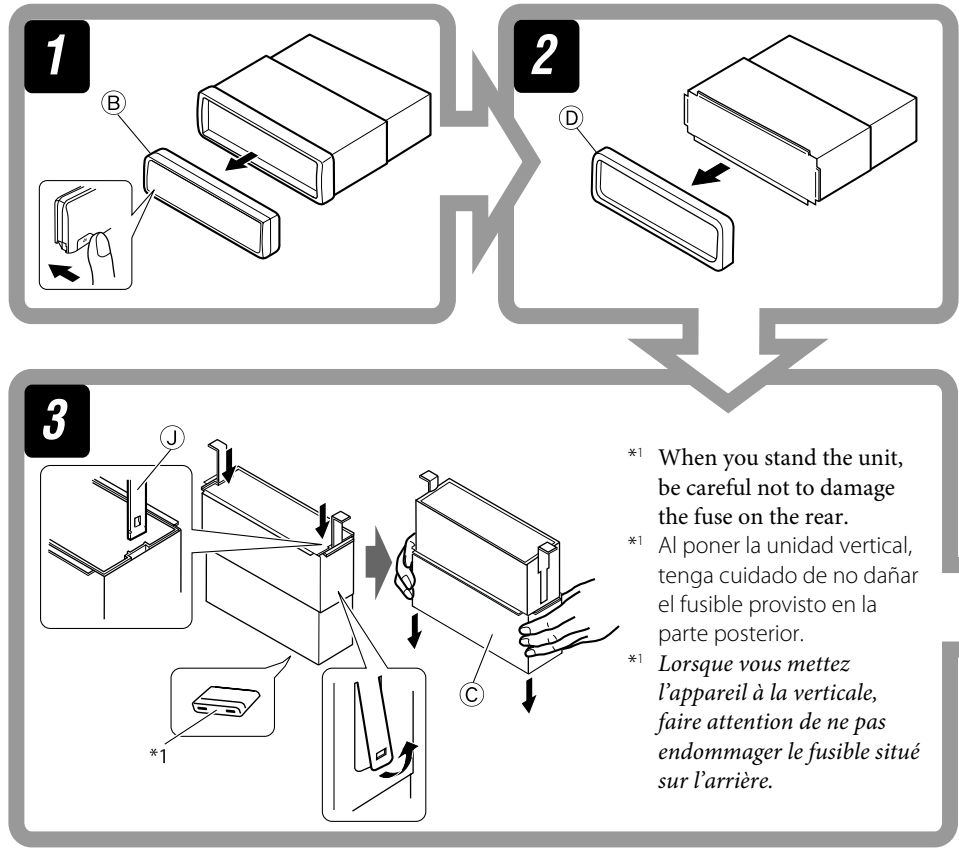
- (L)
- Battery
- Pila
- Pile



INSTALLATION (IN-DASH MOUNTING)

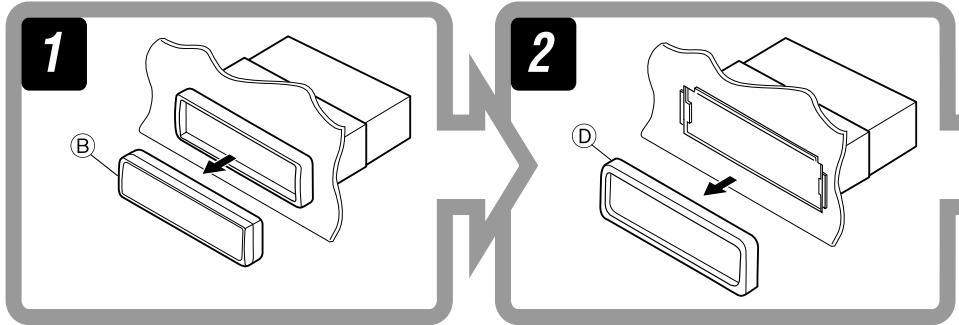
The following illustration shows a typical installation. If you have any questions or require information regarding installation kits, consult your JVC car audio dealer or a company supplying kits.

- If you are not sure how to install this unit correctly, have it installed by a qualified technician.



Removing the unit

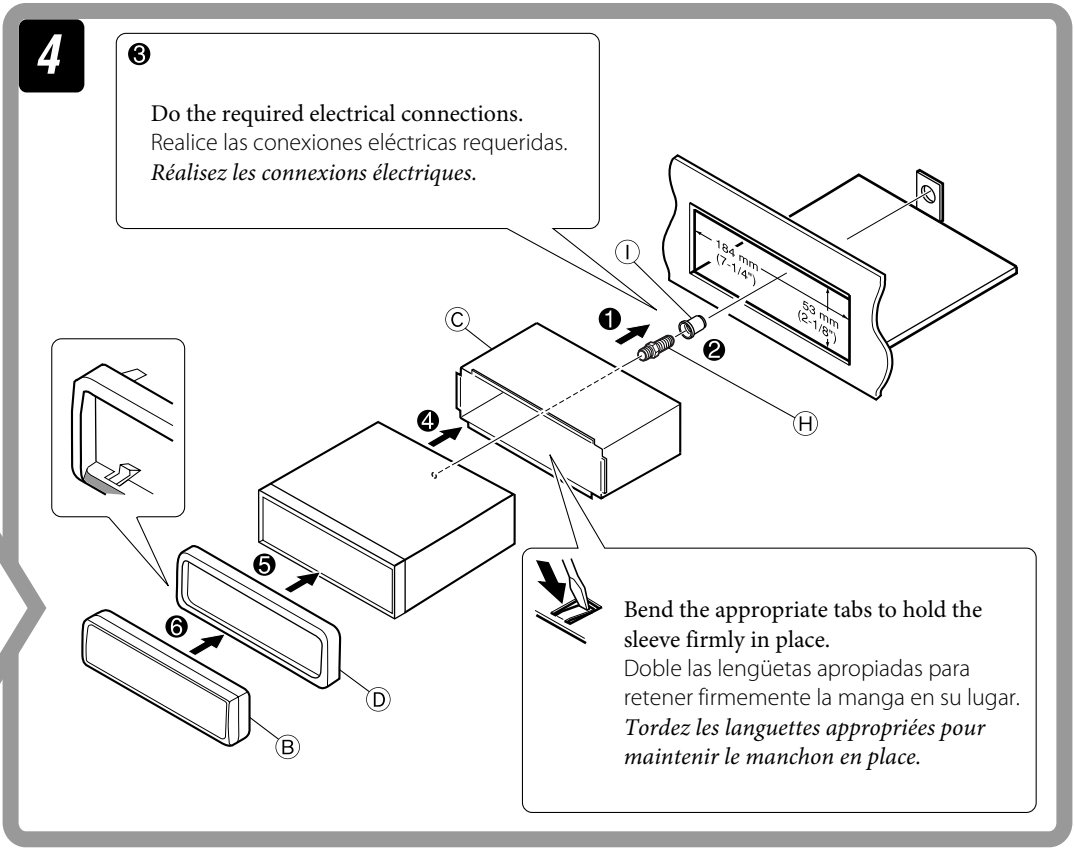
Before removing the unit, release the rear section.



INSTALACION (MONTAJE EN EL TABLERO DE INSTRUMENTOS)

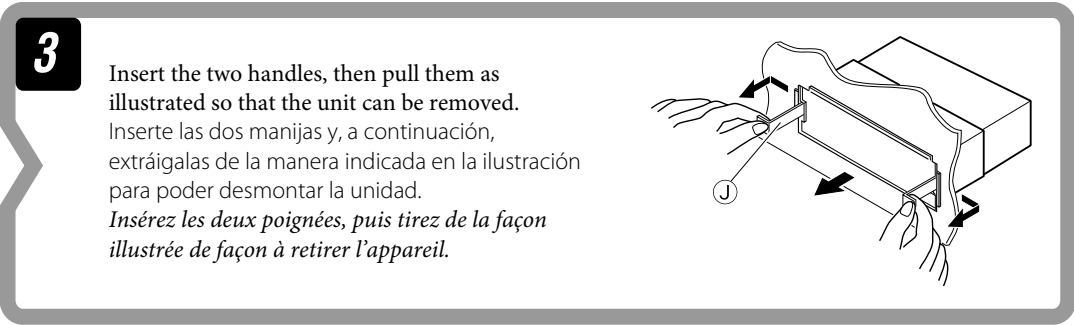
La siguiente ilustración muestra una instalación típica. Si tiene alguna pregunta o necesita información acerca de las herramientas para instalación, consulte con su concesionario de JVC de equipos de audio para automóviles o a una compañía que suministra tales herramientas.

- Si usted no está seguro de cómo instalar correctamente la unidad, hágala instalar por un técnico cualificado.



Extracción de la unidad

Antes de extraer la unidad, libere la sección trasera.



INSTALLATION (MONTAGE DANS LE TABLEAU DE BORD)

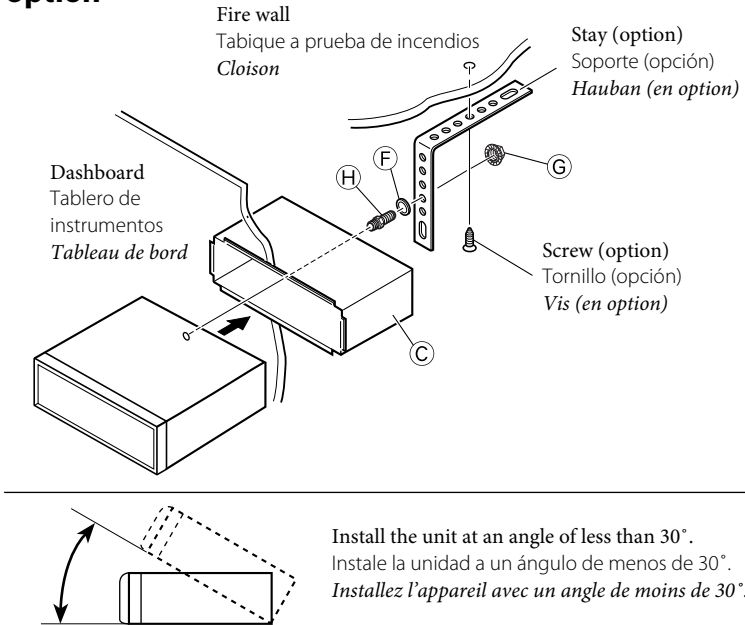
L'illustration suivante est un exemple d'installation typique. Si vous avez des questions ou avez besoin d'information sur des kits d'installation, consulter votre revendeur d'autoradios JVC ou une compagnie d'approvisionnement.

- Si l'on n'est pas sûr de pouvoir installer correctement cet appareil, le faire installer par un technicien qualifié.

Retrait de l'appareil

Avant de retirer l'appareil, libérer la section arrière.

When using the optional stay / Cuando emplea un soporte opcional / Lors de l'utilisation du hauban en option

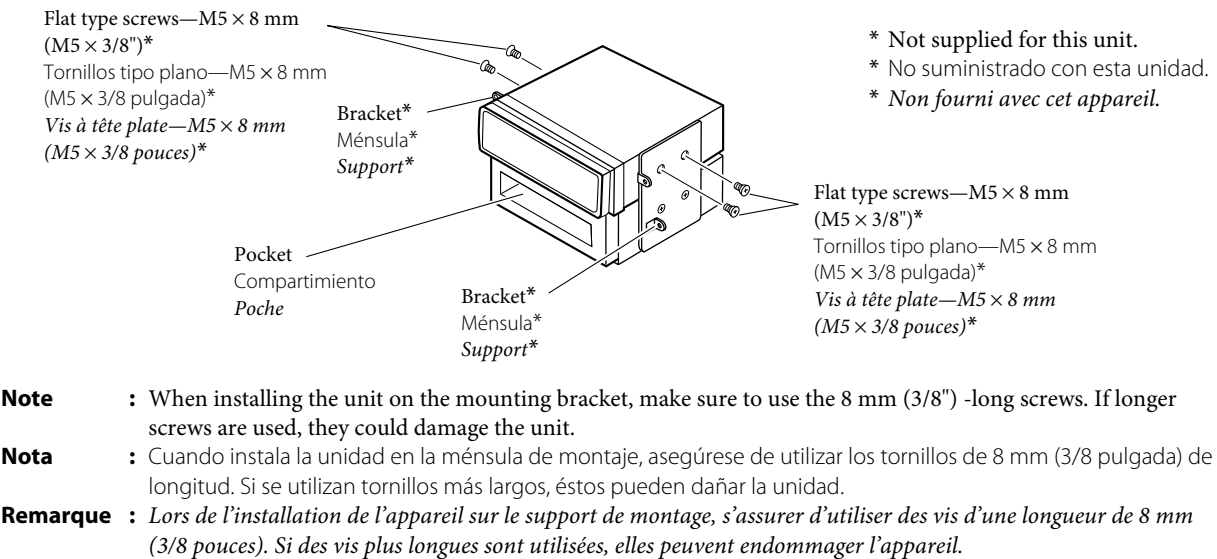


When installing the unit without using the sleeve / Instalación de la unidad sin utilizar la cubierta / Lors de l'installation de l'appareil scans utiliser de manchon

In a Toyota car for example, first remove the car radio and install the unit in its place.

En un automóvil Toyota, por ejemplo, en primer lugar desmonte el autorradio e instale la unidad en su lugar.

Dans une voiture Toyota, par exemple, retirez d'abord l'autoradio et installez l'appareil à sa place.



TROUBLESHOOTING

- **The fuse blows.**
 - * Are the red and black leads connected correctly?
- **Power cannot be turned on.**
 - * Is the yellow lead connected?
- **No sound from the speakers.**
 - * Is the speaker output lead short-circuited?
- **Sound is distorted.**
 - * Is the speaker output lead grounded?
 - * Are the “-” terminals of L and R speakers grounded in common?
- **Noise interfere with sounds.**
 - * Is the rear ground terminal connected to the car's chassis using shorter and thicker cords?
- **Unit becomes hot.**
 - * Is the speaker output lead grounded?
 - * Are the “-” terminals of L and R speakers grounded in common?
- **This unit does not work at all.**
 - * Have you reset your unit?

LOCALIZACION DE AVERIAS

- **El fusible se quema.**
 - * ¿Están los conductores rojo y negro correctamente conectados?
- **No es posible conectar la alimentación.**
 - * ¿Está el cable amarillo conectado?
- **No sale sonido de los altavoces.**
 - * ¿Está el cable de salida del altavoz cortocircuitado?
- **El sonido presenta distorsión.**
 - * ¿Está el cable de salida del altavoz conectado a masa?
 - * ¿Están los terminales “-” de los altavoces L y R conectados a una masa común?
- **Perturbación de ruido.**
 - * ¿El terminal de tierra trasero está conectado al chasis del automóvil utilizando los cordones más corto y más grueso?
- **La unidad se calienta.**
 - * ¿Está el cable de salida del altavoz conectado a masa?
 - * ¿Están los terminales “-” de los altavoces L y R conectados a una masa común?
- **Este receptor no funciona en absoluto.**
 - * ¿Reinició el receptor?

EN CAS DE DIFFICULTES

- **Le fusible saute.**
 - * Les fils rouge et noir sont-ils raccordés correctement?
- **L'appareil ne peut pas être mise sous tension.**
 - * Le fil jaune est-elle raccordée?
- **Pas de son des enceintes.**
 - * Le fil de sortie d'enceinte est-il court-circuité?
- **Le son est déformé.**
 - * Le fil de sortie d'enceinte est-il à la masse?
 - * Les bornes “-” des enceintes gauche et droit sont-elles mises ensemble à la masse?
- **Interférence avec les sons.**
 - * La prise arrière de mise à la terre est-elle connectée au châssis de la voiture avec un cordon court et épais?
- **L'appareil devient chaud.**
 - * Le fil de sortie d'enceinte est-il à la masse?
 - * Les bornes “-” des enceintes gauche et droit sont-elles mises ensemble à la masse?
- **Cet appareil ne fonctionne pas du tout.**
 - * Avez-vous réinitialisé votre appareil?

ELECTRICAL CONNECTIONS

CONEXIONES ELECTRICAS

RACCORDEMENTS ELECTRIQUES

A Typical connections / Conexiones típicas / Raccordements typiques

Before connecting: Check the wiring in the vehicle carefully. Incorrect connection may cause serious damage to this unit. The leads of the power cord and those of the connector from the car body may be different in color.

- 1 Connect the colored leads of the power cord in the order specified in the illustration below.
- 2 Connect the antenna cord.
- 3 Finally connect the wiring harness to the unit.

Antes de la conexión: Verifique atentamente el conexionado del vehículo. Una conexión incorrecta podría producir daños graves en la unidad.

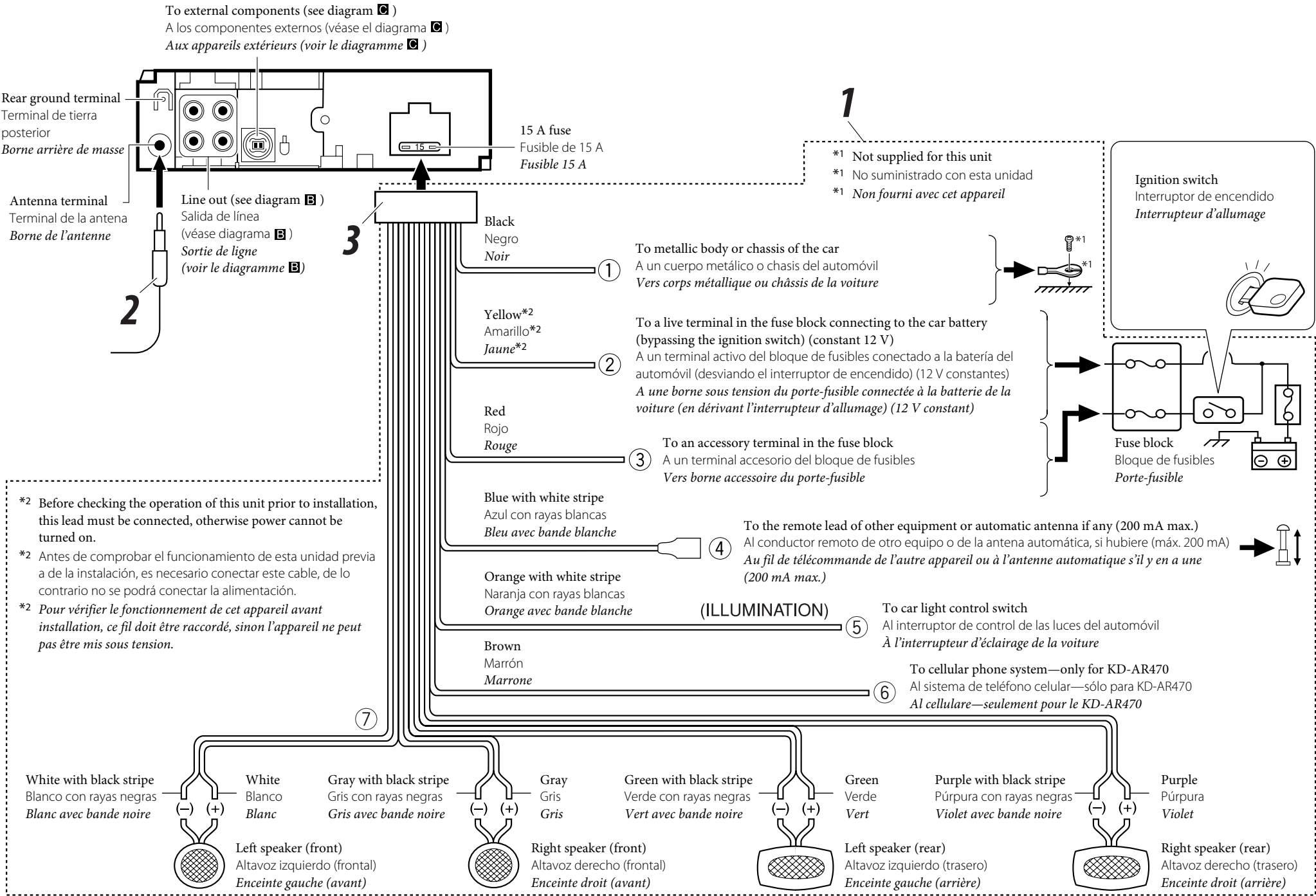
Los cordones del cable de alimentación y los del conector procedentes de la carrocería del automóvil podrían ser de diferentes en color.

- 1 Conecte los conductores de color del cable de alimentación en el orden especificado en la ilustración de abajo.
- 2 Conecte el cable de antena.
- 3 Por último, conecte el cable de alimentación a la unidad.

Avant de commencer la connexion: Vérifiez attentivement le câblage du véhicule. Une connexion incorrecte peut endommager sérieusement l'appareil.

Le fil du cordon d'alimentation et ceux des connecteurs du châssis de la voiture peuvent être différents en couleur.

- 1 Connectez les fils colorés du cordon d'alimentation dans l'ordre spécifié sur l'illustration ci-dessous.
- 2 Connectez le cordon d'antenne.
- 3 Finalement, connectez le faisceau de fils à l'appareil.



B Connecting the external amplifiers / Conexión a los amplificadores externos / Connexion d'amplificateurs extérieurs

You can connect amplifiers to upgrade your car stereo system.

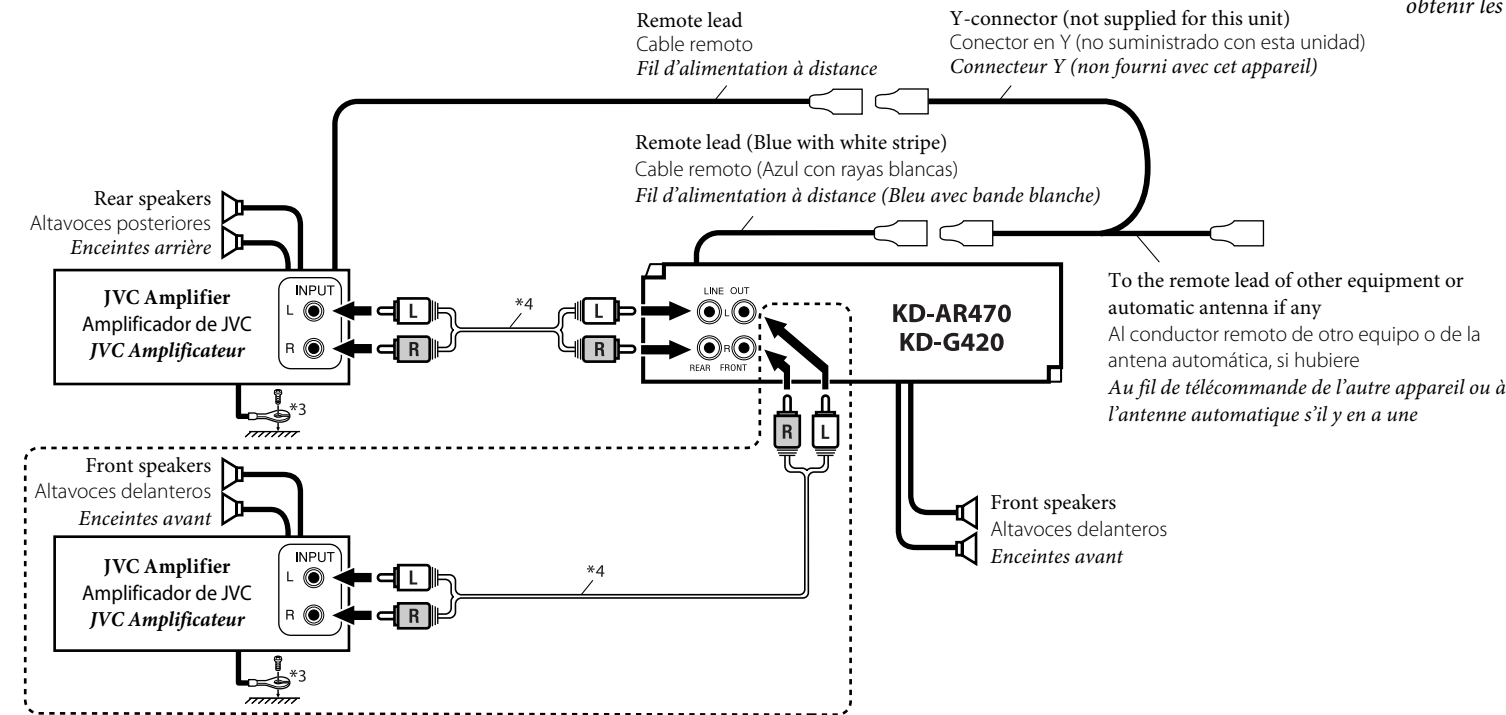
- Connect the remote lead (blue with white stripe) to the remote lead of the other equipment so that it can be controlled through this unit.
- **Disconnect the speakers from this unit, connect them to the amplifier. Leave the speaker leads of this unit unused.**
- For KD-AR470: The line output level of this unit is kept high to maintain the hi-fi sounds reproduced from this unit. When connecting an external amplifier to this unit, turn down the gain control on the external amplifier to obtain the best performance from this unit.

Usted podrá conectar amplificadores para mejorar el sistema estéreo de su automóvil.

- Conecte el conductor remoto (azul con rayas blancas) al conductor remoto del otro equipo para poderlo controlar a través de esta unidad.
- **Desconecte los altavoces de esta unidad y conéctelos al amplificador. Los cables de los altavoces de esta unidad quedan sin usar.**
- Para KD-AR470: El nivel de salida de línea de esta unidad permanece alto para que corresponda con los sonidos de alta fidelidad reproducidos por esta unidad. Cuando conecte un amplificador externo a esta unidad, disminuya el control de ganancia del amplificador externo para obtener un óptimo rendimiento de esta unidad.

Vous pouvez connecter des amplificateurs pour améliorer votre système autoradio.

- Connectez le fil de commande à distance (bleu avec bande blanche) au fil de commande à distance de l'autre appareil de façon qu'il puisse être commandé via cet appareil.
- **Déconnectez les enceintes de cet appareil et connectez-les à l'amplificateur. Laissez les fils d'enceintes de cet appareil inutilisés.**
- Pour le KD-AR470: Le niveau de sortie de ligne de cet appareil est maintenu à un niveau élevé pour maintenir une qualité Hi-Fi pour les sons reproduits par cet appareil. Lors de la connexion d'un amplificateur extérieur à cet appareil, diminuez le réglage du gain sur l'amplificateur extérieur pour obtenir les meilleures performances de cet appareil.



C Connecting other external components / Conexión de otros componentes externos / Connexion d'un autre appareil extérieur

• Set "EXT IN" to "CHANGER" (See page 14 of the INSTRUCTIONS.) / Ajuste "EXT IN" a "CHANGER" (Consulte la página 14 del MANUAL DE INSTRUCCIONES.) / Réglez "EXT IN" sur "CHANGER" (Voir la page 14 du MANUEL D'INSTRUCTIONS.)

JVC CD changer, SIRIUS Satellite radio, XM Satellite radio, Apple iPod®, or JVC D. player / Cambiador de CD de JVC, radio satelital SIRIUS, radio satelital XM, iPod® de Apple o reproductor JVC D. / Changeur de CD JVC, radio satellite SIRIUS, radio satellite XM, iPod® Apple ou lecteur D. JVC

You can connect these components in series as illustrated below.

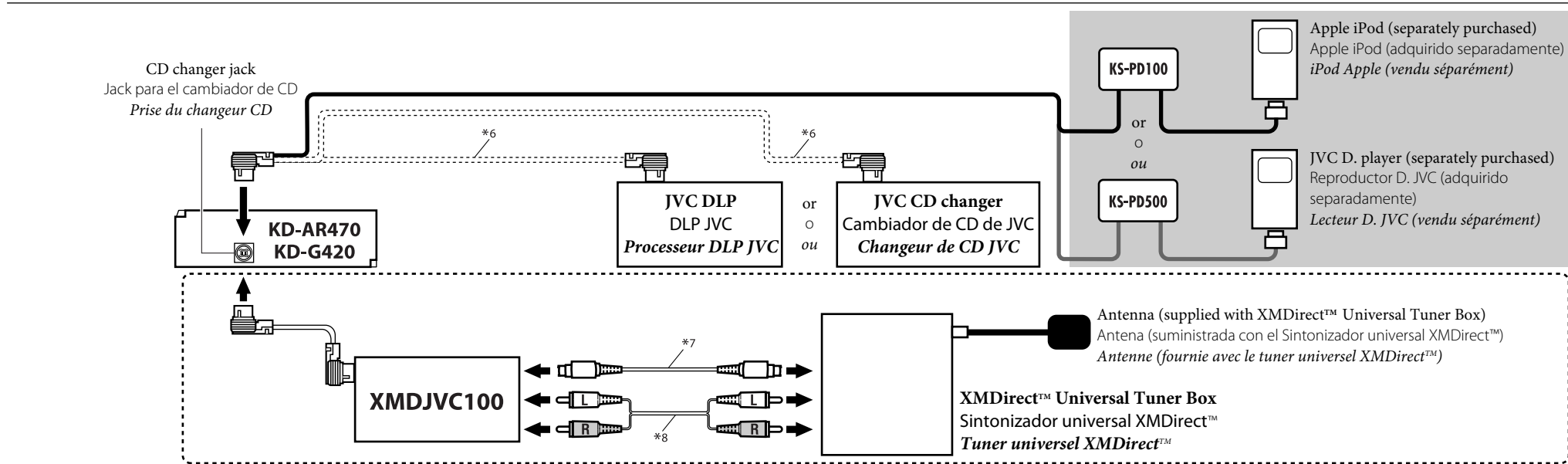
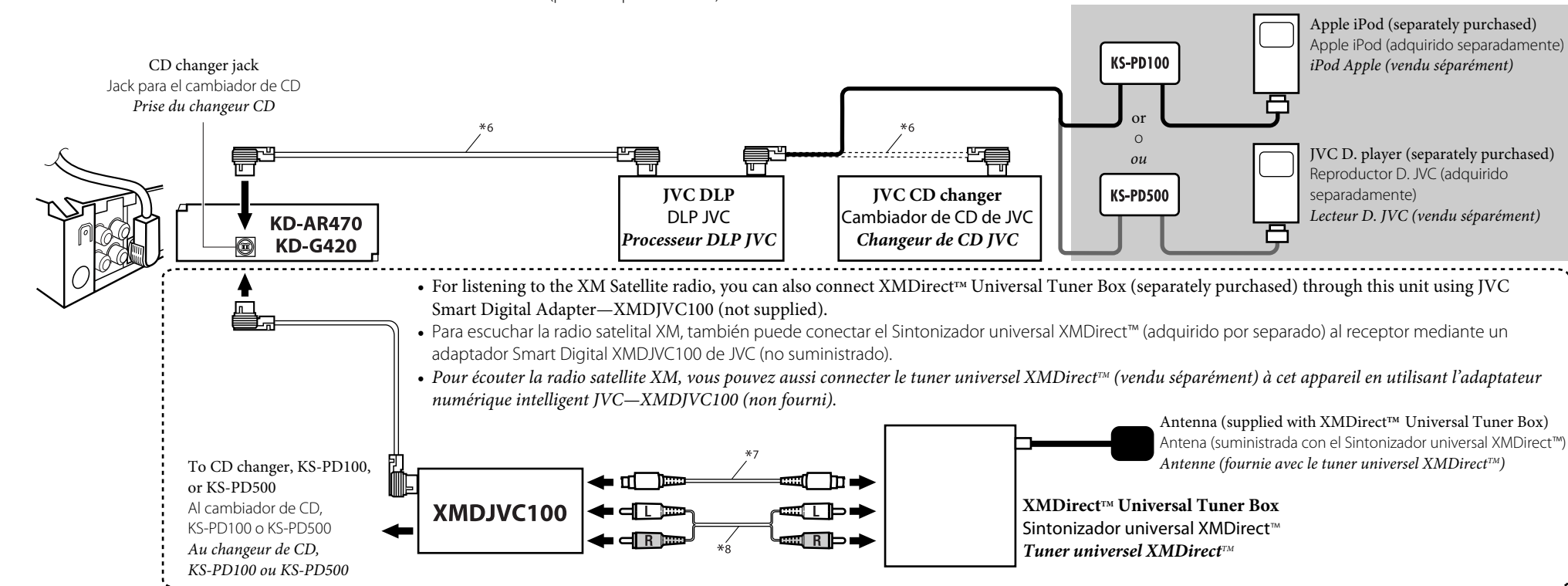
- For listening to the SIRIUS Satellite radio, connect a JVC DLP —Down Link Processor (separately purchased) to this unit.
- The iPod®5 or D. player can be connected using an interface adapter (not supplied)—KS-PD100 (for iPod) or KS-PD500 (for D. player).

Estos componentes se pueden conectar en serie, tal como se muestra en la ilustración de abajo.

- Para escuchar la radio satelital SIRIUS, conecte un DLP (Down Link Processor) de JVC (adquirido por separado) al receptor.
- Puede conectar el iPod®5 o el reproductor D. usando un adaptador de interfaz (no suministrado)—KS-PD100 (para iPod) o KS-PD500 (para el reproductor D.).

Vous pouvez connecter ces appareils en série comme montrée sur l'illustration.

- Pour écouter la radio satellite SIRIUS, connectez un processeur DLP JVC —Processeur de signaux satellite-terre (vendu séparément) à cet appareil.
- Le iPod®5 ou le lecteur D. peut être connecté en utilisant un adaptateur d'interface (non fourni)—KS-PD100 (pour iPod) ou KS-PD500 (pour le lecteur D.).



CAUTION / PRECAUCION / PRECAUTION:

- Before connecting the external components, make sure that the unit is turned off.
- Antes de conectar los componentes externos, asegúrese de que la unidad esté apagada.
- Avant de connecter les appareils extérieurs, assurez-vous que l'appareil est hors tension.

- *5 iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.
- *5 iPod es una marca comercial de Apple Computer, Inc., registrada en los EE.UU. y otros países.
- *5 iPod est une marque de commerce d'Apple Computer, Inc., enregistrée aux États-Unis et dans les autres pays.

- *6 Signal cord supplied with your JVC CD changer or DLP
- *6 Cable de señal suministrado con su cambiador de CD o DLP JVC
- *6 Cordon de signal fourni avec votre changeur de CD ou processeur DLP JVC

- *7 Signal cord supplied with your Smart Digital Adapter
- *7 Cable de señal suministrado con el adaptador Smart Digital
- *7 Cordon de signal fourni avec votre adaptateur numérique intelligent

- *8 Audio signal cord supplied with your Smart Digital Adapter
- *8 Cable de señal de audio suministrado con el adaptador Smart Digital
- *8 Cordon audio fourni avec votre adaptateur numérique intelligent

• Set "EXT IN" to "EXT IN" (See page 14 of the INSTRUCTIONS.) / Ajuste "EXT IN" a "EXT IN" (Consulte la página 14 del MANUAL DE INSTRUCCIONES.) / Réglez "EXT IN" sur "EXT IN" (Voir la page 14 du MANUEL D'INSTRUCTIONS.)

JVC PnP (Plug and Play) / PnP ("Plug and Play") JVC / PnP ("Plug and Play") JVC

You can also connect JVC PnP through this unit using JVC SIRIUS radio adapter, KS-U100K (not supplied).

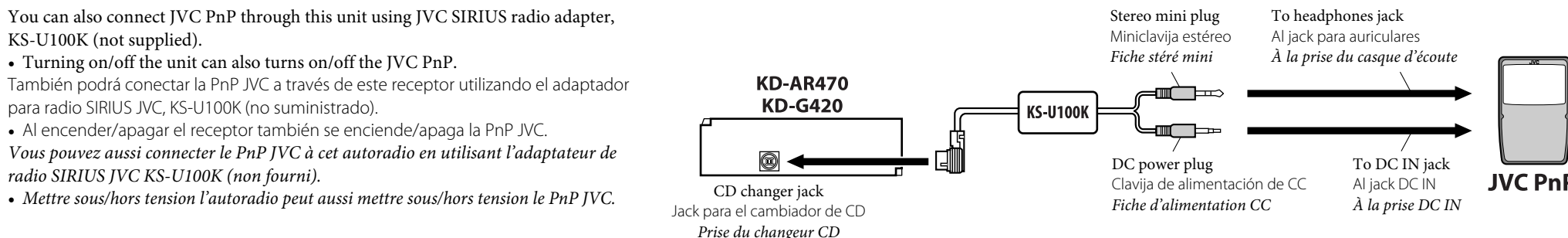
- Turning on/off the unit can also turns on/off the JVC PnP.

También podrá conectar la PnP JVC a través de este receptor utilizando el adaptador para radio SIRIUS JVC, KS-U100K (no suministrado).

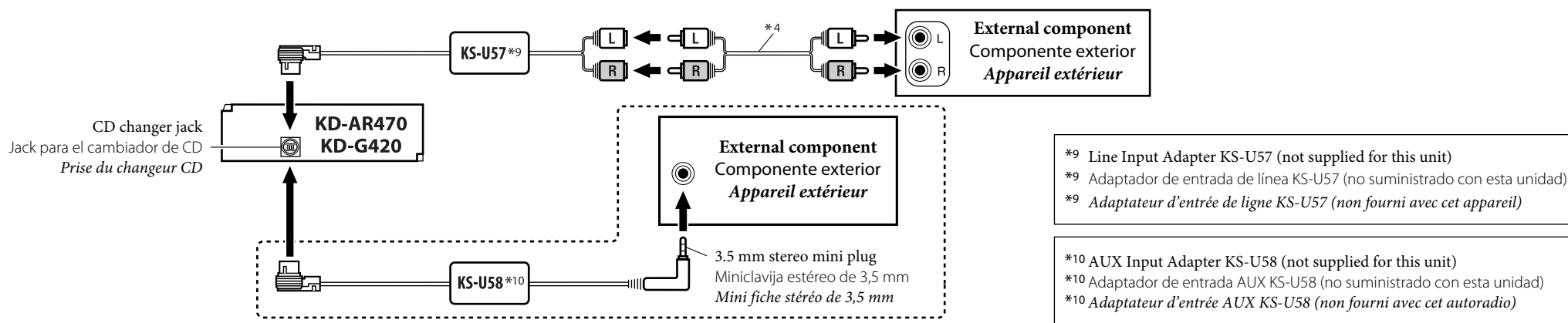
- Al encender/apagar el receptor también se enciende/apaga la PnP JVC.

Vous pouvez aussi connecter le PnP JVC à cet autoradio en utilisant l'adaptateur de radio SIRIUS JVC KS-U100K (non fourni).

- Mettre sous/hors tension l'autoradio peut aussi mettre sous/hors tension le PnP JVC.



Other external component / Otro componente externo / Autre appareil extérieur



JVC

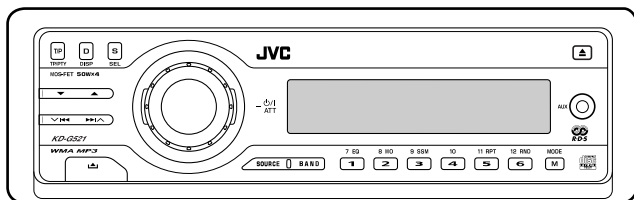
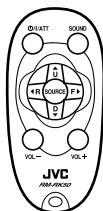
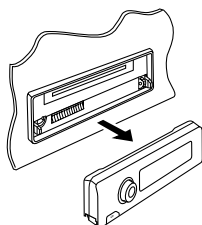


ENGLISH

FRANÇAIS

CD RECEIVER RECEPTEUR CD

KD-G521



WMA

MP3



For canceling the display demonstration, see page 6.

Pour annuler la démonstration des affichages, référez-vous à la page 6.

For installation and connections, refer to the separate manual.

Pour l'installation et les raccordements, se référer au manuel séparé.

INSTRUCTIONS MANUEL D'INSTRUCTIONS

GET0339-003A
[EX/EU]

Thank you for purchasing a JVC product.

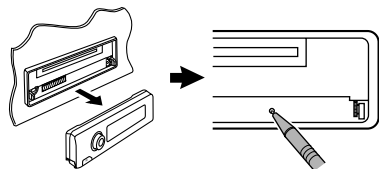
Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

IMPORTANT FOR LASER PRODUCTS

1. CLASS 1 LASER PRODUCT
2. **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
3. **CAUTION:** Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED OUTSIDE THE UNIT.

CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM.	ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling. (e)	VARNING : Synlig og usynlig laserstråling når den åbnes og spærren er urkøoplad. Betrakta ej strålen. (d)	VARO : Avtäckas ja suojalukitus ohjettuna tai välillä olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)
---	--	--	---

How to reset your unit

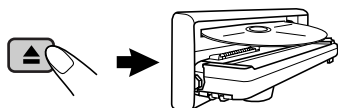


Your preset adjustments will also be erased.

How to forcibly eject a disc



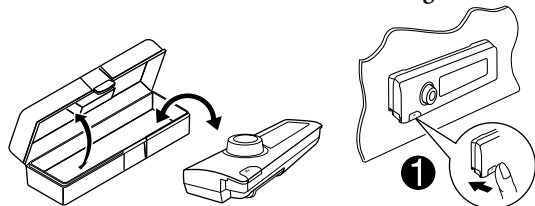
“PLEASE” and “EJECT” appear alternately on the display.



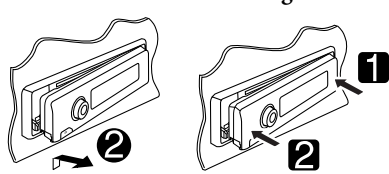
- If this does not work, reset your unit.
- Be careful not to drop the disc when it ejects.

How to detach/attach the control panel

Detaching...



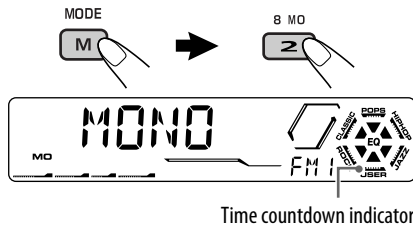
Attaching...



How to use the M MODE button

If you press M MODE, the unit goes into functions mode, then the number buttons and ▲/▼ buttons work as different function buttons.

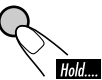
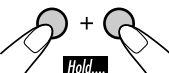
Ex.: When number button 2 works as MO (monaural) button.



To use these buttons for their original functions again after pressing M MODE, wait for 5 seconds without pressing any of these buttons until the functions mode is cleared or press M MODE again.

How to read this manual

- Button operations are mainly explained with the illustrations in the table below.
- Some related tips and notes are explained in “More about this unit” (see pages 19 – 21).

	Press briefly.
	Press repeatedly.
	Press either one.
	Press and hold until your desired response begins.
	Press and hold both buttons at the same time.

The following marks are used to indicate...



: Built-in CD player operations.



: External CD changer operations.



: Indicator displayed for the corresponding operation.

Warning:

If you need to operate the unit while driving, be sure to look ahead carefully or you may be involved in a traffic accident.

Caution on volume setting:

Discs produce very little noise compared with other sources. Lower the volume before playing a disc to avoid damaging the speakers by the sudden increase of the output level.

CONTENTS

Control panel	4
Remote controller — RM-RK50	5
Getting started	6
Basic operations	6
Radio operations	7
FM RDS operations	8
Searching for your favorite FM RDS programme ...	8
Disc operations	10
Playing a disc in the unit	10
Playing discs in the CD changer	10
Sound adjustments	13
General settings — PSM	14
External component operations	17
DAB tuner operations	18
More about this unit	19
Maintenance	22
Troubleshooting	23
Specifications	25

Note: Only for [EX] model users in UK and European countries

For security reasons, a numbered ID card is provided with this unit, and the same ID number is imprinted on the unit's chassis. Keep the card in a safe place, as it will help the authorities to identify your unit if stolen.

For safety...

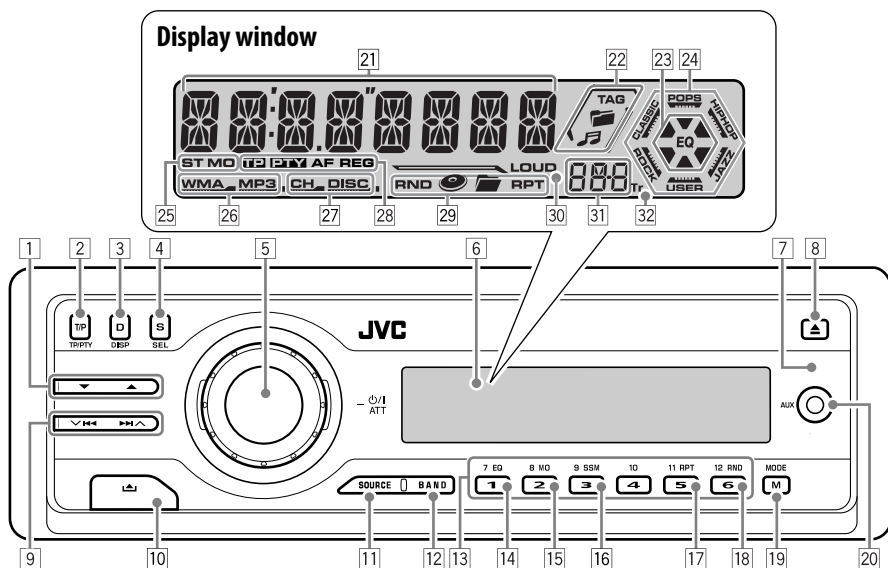
- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operations.

Temperature inside the car...

If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.

Control panel

Parts identification

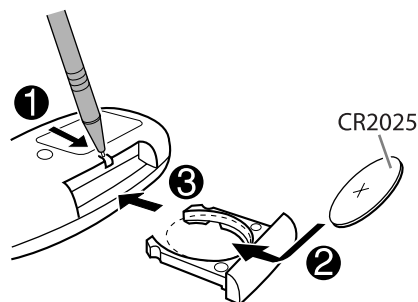


- 1 ▲ (up) / ▼ (down) buttons
- 2 T/P TP/PTY (traffic programme/ programme type) button
- 3 D DISP (display) button
- 4 S SEL (select) button
- 5 • Control dial
 - ϕ /I ATT (standby/on attenuator) button
- 6 Display window
- 7 Remote sensor
 - *DO NOT expose the remote sensor to strong light (direct sunlight or artificial lighting).*
- 8 ▲ (eject) button
- 9 ▼ ◀ ▶ ▶▶ ▶ buttons
- 10 ▲ (control panel release) button
- 11 SOURCE button
- 12 BAND button
- 13 Number buttons
- 14 EQ (equalizer) button
- 15 MO (monaural) button
- 16 SSM (Strong-station Sequential Memory) button
- 17 RPT (repeat) button
- 18 RND (random) button
- 19 M MODE button
- 20 AUX (auxiliary) input jack

Display window

- 21 Main display
- 22 Disc information indicators—TAG (ID3 Tag), (folder), (track/file)
- 23 EQ (equalizer) indicator
- 24 Sound mode (C-EQ: custom equalizer) indicators—ROCK, CLASSIC, POPS, HIP HOP, JAZZ, USER
 - also works as the time countdown indicator and level meter during play (see page 16).
- 25 Tuner reception indicators—ST (stereo), MO (monaural)
- 26 Disc type indicators—WMA, MP3
- 27 Playback source indicators—
 - CH: *Lights up only when CD-CH is selected as the playback source.*
 - DISC: *Lights up for the built-in CD player.*
- 28 RDS indicators—TP, PTY, AF, REG
- 29 Playback mode / item indicators—
 - RND (random), (disc), (folder), RPT (repeat)
- 30 LOUD (loudness) indicator
- 31 Source display / Volume level indicator
- 32 Tr (track) indicator

Installing the lithium coin battery (CR2025)

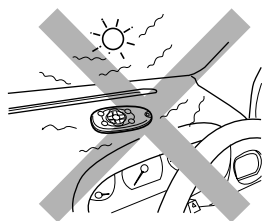


Aim the remote controller directly at the remote sensor on the unit. Make sure there is no obstacle in between.

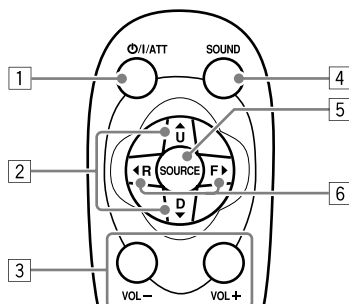
Warning:

- Do not install any battery other than CR2025 or its equivalent; otherwise, it may explode.
- Store the battery in a place where children cannot reach to avoid risk of accident.
- To prevent the battery from over-heating, cracking, or starting a fire:
 - Do not recharge, short, disassemble, heat the battery, or dispose of it in a fire.
 - Do not leave the battery with other metallic materials.
 - Do not poke the battery with tweezers or similar tools.
 - Wrap the battery with tape and insulate when throwing away or saving it.

Caution:



Main elements and features



- 1** **⏻/I/ATT** (standby/on/attenuator) button
 - Turns the power on if pressed briefly or attenuates the sound when power is on.
 - Turns the power off if pressed and held.
- 2** **▲ U (up) / D (down) ▼** buttons
 - Changes the FM/AM/DAB bands with ▲ U only.
 - Changes the preset stations (or services) with D ▼ only.
 - Changes the folder of the MP3/WMA discs.
 - While playing an MP3 disc on an MP3-compatible CD changer:
 - Changes the disc if pressed briefly.
 - Changes the folder if pressed and held.
- 3** **VOL – / VOL +** buttons
 - Adjusts the volume level.
- 4** **SOUND** button
 - Selects the sound mode (C-EQ: custom equalizer).
- 5** **SOURCE** button
 - Selects the source.
- 6** **◀ R (reverse) / F (forward) ▶** buttons
 - Searches for stations (or services) if pressed briefly.
 - Searches for ensembles if pressed and held.
 - Fast-forwards or reverses the track if pressed and held.
 - Changes the tracks of the disc if pressed briefly.

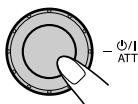
The unit is equipped with the steering wheel remote control function.

- See the Installation/Connection Manual (separate volume) for connection.

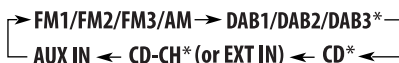
Getting started

Basic operations

- 1 Turn on the power.



- 2



- Select "CD-CH" when using an Apple iPod® or a JVC D. player (see page 17).

iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.

* You cannot select these sources if they are not ready.

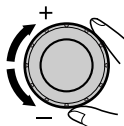
- 3 • For FM/AM tuner



- For DAB tuner



- 4 Adjust the volume.



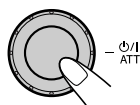
Volume level appears.



Volume level indicator

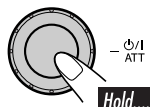
- 5 Adjust the sound as you want. (See pages 13 and 14.)

To drop the volume in a moment (ATT)



To restore the sound, press it again.

To turn off the power



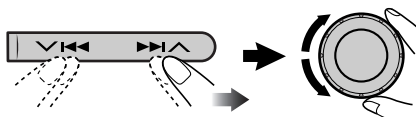
Basic settings

- See also "General settings — PSM" on pages 14 – 16.

- 1



- 2



- 1 Canceling the display demonstrations

Select "DEMO," then "DEMO OFF."

- 2 Setting the clock

Select "CLOCK H" (hour), then adjust the hour.

Select "CLOCK M" (minute), then adjust the minute.

Select "24H/12H," then "24H" (hour) or "12H" (hour).

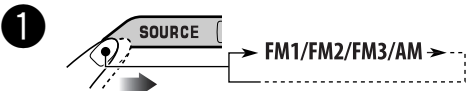
- 3 Finish the procedure.



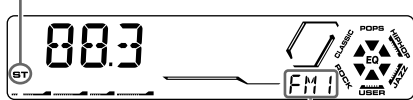
To check the current clock time when the power is turned off



Radio operations

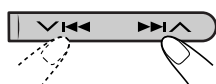


Lights up when receiving an FM stereo broadcast with sufficient signal strength.



Selected band appears.

3 Start searching for a station.

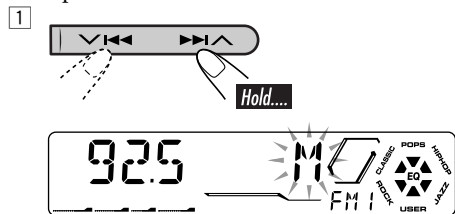


When a station is received, searching stops.

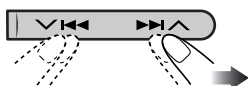
To stop searching, press the same button again.

To tune in to a station manually

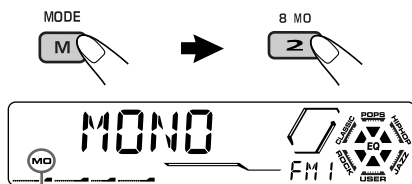
In step 3 above...



2 Select the desired station frequencies.



When an FM stereo broadcast is hard to receive



Lights up when monaural mode is activated.

Reception improves, but stereo effect will be lost.

To restore the stereo effect, repeat the same procedure. "MONO OFF" appears and the MO indicator goes off.

Storing stations in memory

You can preset six stations for each band.

FM station automatic presetting—SSM (Strong-station Sequential Memory)

1 Select the FM band (FM1 – FM3) you want to store into.

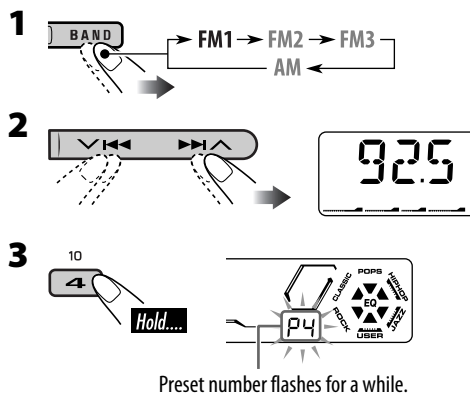


"SSM" flashes, then disappears when automatic presetting is over.

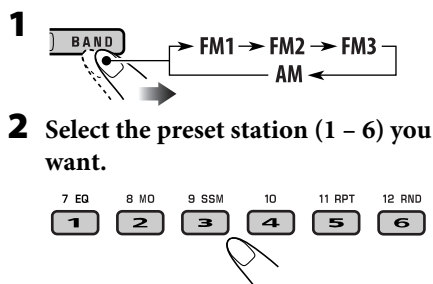
Local FM stations with the strongest signals are searched and stored automatically in the FM band.

Manual presetting

Ex.: Storing FM station of 92.5 MHz into preset number 4 of the FM1 band.



Listening to a preset station



To check the current clock time while listening to an FM (non-RDS) or AM station

- For FM RDS stations, see page 10.



FM RDS operations

What you can do with RDS

RDS (Radio Data System) allows FM stations to send an additional signal along with their regular programme signals.

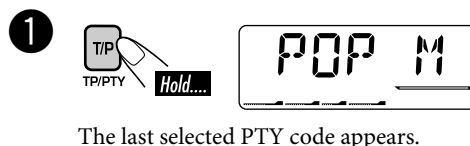
By receiving the RDS data, this unit can do the following:

- Programme Type (PTY) Search (see the following)
- TA (Traffic Announcement) and PTY Standby Receptions (see pages 9 and 15)
- Tracing the same programme automatically —Network-Tracking Reception (see page 10)
- Programme Search (see page 15)

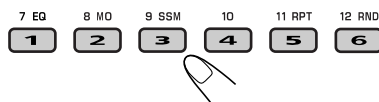
Searching for your favorite FM RDS programme

You can tune in to a station broadcasting your favorite programme by searching for a PTY code.

- To store your favorite programme types, see page 9.

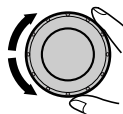


2 Select one of your favorite programme types.

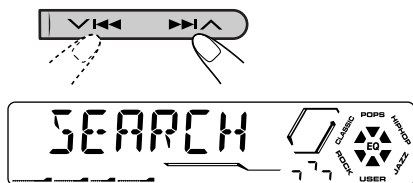


or

Select one of the PTY codes (see page 10).



- 3** Start searching for your favorite programme.



If there is a station broadcasting a programme of the same PTY code as you have selected, that station is tuned in.

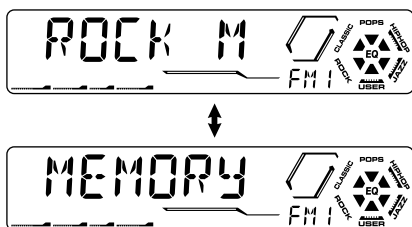
Storing your favorite programme types

You can store six favorite programme types.

Preset programme types in the number buttons (1 to 6):

1	2	3	4	5	6
POP M	ROCK M	EASY M	CLASSICS	AFFAIRS	VARIED

- Select a PTY code (see page 8).
- Select the preset number (1 – 6) you want to store into.



Ex.: When "ROCK M" is selected

- Repeat steps 1 and 2 to store other PTY codes into other preset numbers.
- Finish the procedure.



Using the standby receptions

TA Standby Reception

TA Standby Reception allows the unit to switch temporarily to Traffic Announcement (TA) from any source other than AM.

The volume changes to the preset TA volume level (see page 15).

To activate TA Standby Reception



The TP (Traffic Programme) indicator either lights up or flashes.

- If the TP indicator lights up, TA Standby Reception is activated.
 - If the TP indicator flashes, TA Standby Reception is not yet activated. (This occurs when you are listening to an FM station without the RDS signals required for TA Standby Reception.)
- To activate TA Standby Reception, tune in to another station providing these signals. The TP indicator will stop flashing and remain lit.

To deactivate the TA Standby Reception



The TP indicator goes off.

PTY Standby Reception

PTY Standby Reception allows the unit to switch temporarily to your favorite PTY programme from any source other than AM.

To activate and select your favorite PTY code for PTY Standby Reception, see page 15. The PTY indicator either lights up or flashes.

- If the PTY indicator lights up, PTY Standby Reception is activated.
 - If the PTY indicator flashes, PTY Standby Reception is not yet activated.
- To activate PTY Standby Reception, tune in to another station providing these signals. The PTY indicator will stop flashing and remain lit.

To deactivate the PTY Standby Reception, select "OFF" for the PTY code (see page 15). The PTY indicator goes off.

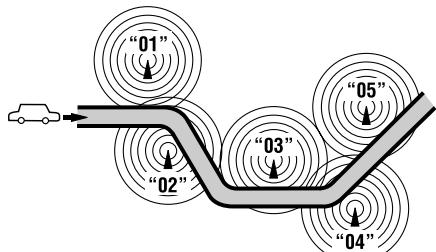
Tracing the same programme— Network-Tracking Reception

When driving in an area where FM reception is not sufficient enough, this unit automatically tunes in to another FM RDS station of the same network, possibly broadcasting the same programme with stronger signals (see the illustration below).

When shipped from the factory, Network-Tracking Reception is activated.

To change the Network-Tracking Reception setting, see “AF-REG” on page 15.

Programme A broadcasting on different frequency areas (01 – 05)



To check the current clock time while listening to an FM RDS station



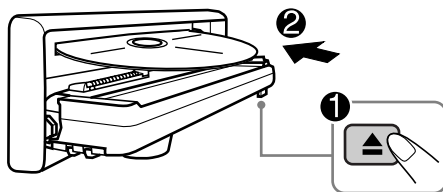
Station name (PS) → Station
Frequency → Programme type
(PTY) → Clock → (back to the
beginning)

PTY codes

NEWS, AFFAIRS, INFO, SPORT, EDUCATE,
DRAMA, CULTURE, SCIENCE, VARIED,
POP M (music), ROCK M (music), EASY
M (music), LIGHT M (music), CLASSICS,
OTHER M (music), WEATHER, FINANCE,
CHILDREN, SOCIAL, RELIGION, PHONE
IN, TRAVEL, LEISURE, JAZZ, COUNTRY,
NATION M (music), OLDIES, FOLK M
(music), DOCUMENT

Disc operations

Playing a disc in the unit



All tracks will be played repeatedly until you change the source or eject the disc.

To stop play and eject the disc

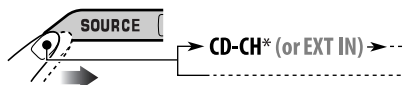


Playing discs in the CD changer

All discs in the magazine will be played repeatedly until you change the source.

- Ejecting the magazine will also stop playing.

1



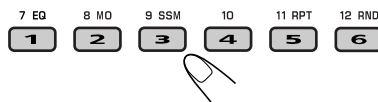
* If you have changed “EXT IN” setting to “EXT IN” (see page 16), you cannot select the CD changer.

See also page 17 when using an iPod or JVC D. player.

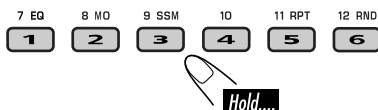
2

Select a disc.

For disc number from 01 – 06:



For disc number from 07 – 12:



About MP3 and WMA discs

MP3 and WMA “tracks” (words “file” and “track” are used interchangeably) are recorded in “folders.”

About the CD changer

It is recommended to use a JVC MP3-compatible CD changer with your unit.

- You can also connect other CH-X series CD changers (except CH-X99 and CH-X100). These units are not compatible with MP3 discs.
- You cannot play any WMA disc in the CD changer.
- You cannot use the KD-MK series CD changers with this unit.
- Disc text information recorded in the CD Text can be displayed when a JVC CD Text compatible CD changer is connected.
- For connection, see Installation/Connection Manual (separate volume).

To fast-forward or reverse the track



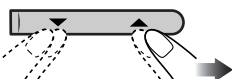
To go to the next or previous tracks



To go to the next or previous folders (only for MP3 or WMA discs)

For MP3 discs:  

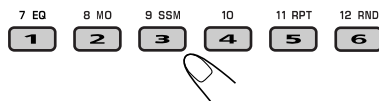
For WMA discs: 



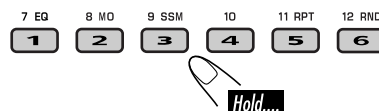
To locate a particular track (for CD) or folder (for MP3 or WMA discs) directly



To select a number from 01 – 06:

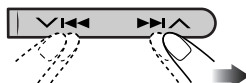


To select a number from 07 – 12:



- To use folder search on MP3/WMA discs, it is required that folders are assigned with 2-digit numbers at the beginning of their folder names—01, 02, 03, and so on.

- To select a particular track in a folder (for MP3 or WMA disc):



Other main functions

■ Skipping a track quickly during play



Only possible on JVC
MP3-compatible CD changer

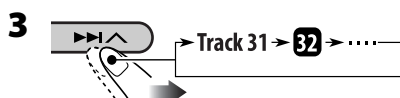
- For MP3 or WMA disc, you can skip a track within the same folder.

Ex.: To select track 32 while playing track 6



Each time you press the button, you can skip 10 tracks.

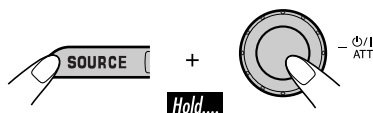
- After the last track, the first track will be selected and vice versa.



■ Prohibiting disc ejection



You can lock a disc in the loading slot.



To cancel the prohibition, repeat the same procedure.



Changing the display information

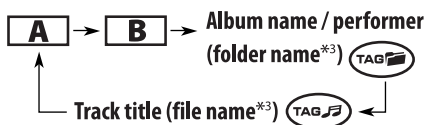


■ While playing an audio CD or a CD Text

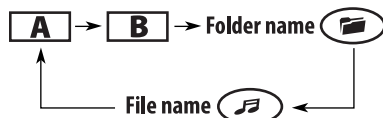


■ While playing an MP3 or WMA*2 disc

- When "TAG DISP" is set to "TAG ON" (see page 16)



- When "TAG DISP" is set to "TAG OFF"



A : Elapsed playing time with the current track number

B : Clock with the current track number

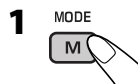
*1 If the current disc is an audio CD, "NO NAME" appears.

*2 Only for the built-in CD player.

*3 If an MP3/WMA file does not have ID3 tags, folder name and file name appear. In this case, the TAG indicator will not light up.

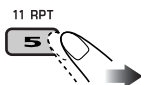
Selecting the playback modes

You can use only one of the following playback modes at a time.



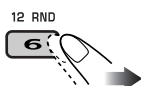
2 Select your desired playback mode.

Repeat play



Mode	Plays repeatedly
TRK RPT	: The current track.
FLDR RPT *1	: All tracks of the current folder.
DISC RPT *2	: All tracks of the current disc.
RPT OFF	: Cancels.

Random play



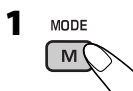
Mode	Plays at random
FLDR RND *1	: All tracks of the current folder, then tracks of the next folder and so on.
DISC RND	: All tracks of the current disc.
MAG RND *2	: All tracks of the inserted discs.
RND OFF	: Cancels.

*1 Only while playing an MP3 or WMA disc.

*2 Only while playing discs in the CD changer.

Sound adjustments

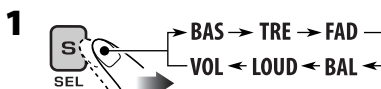
You can select a preset sound mode suitable to the music genre (C-EQ: custom equalizer).



Preset values Indication (For)	BAS (bass)	TRE (treble)	LOUD (loudness)
USER (Flat sound)	00	00	OFF
ROCK (Rock or disco music)	+03	+01	ON
CLASSIC (Classical music)	+01	-02	OFF
POPS (Light music)	+04	+01	OFF
HIP HOP (Funk or rap music)	+02	00	ON
JAZZ (Jazz music)	+02	+03	OFF

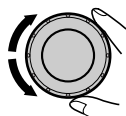
Adjusting the sound

You can adjust the sound characteristics to your preference.

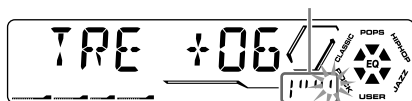


To be continued...

2



Indication pattern changes as you adjust the level.



Ex.: When "TRE" is selected

Indication [Range]

BAS*1 (bass)

Adjust the bass. [-06 to +06]

TRE*1 (treble)

Adjust the treble. [-06 to +06]

FAD*2 (fader)

Adjust the front and rear speaker balance.
[R06 to F06]

BAL (balance)

Adjust the left and right speaker balance.
[L06 to R06]

LOUD*1 (loudness)

Boost low and high frequencies to produce
a well-balanced sound at low volume level.
[LOUD ON or LOUD OFF]

VOL (volume)

Adjust the volume. [00 to 30 or 50*3]

*1 When you adjust the bass, treble, or loudness,
the adjustment you have made is stored for
the currently selected sound mode (C-EQ)
including "USER."

*2 If you are using a two-speaker system, set the
fader level to "00."

*3 Depending on the amplifier gain control
setting. (See page 16 for details.)

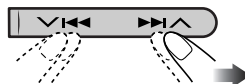
General settings — PSM

You can change PSM (Preferred Setting Mode)
items listed in the table that follows.

1

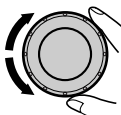


2 Select a PSM item.



Ex.: When you select "DIMMER"

3 Adjust the PSM item selected.



4 Repeat steps 2 and 3 to adjust the
other PSM items if necessary.

5 Finish the procedure.



Indications	Selectable settings, [reference page]
DEMO Display demonstration	DEMO ON : [Initial]; Display demonstration will be activated automatically if no operation is done for about 20 seconds, [6]. DEMO OFF : Cancels.
CLOCK H Hour adjustment	0 – 23 (1 – 12), [6] [Initial: 0 (0:00)]
CLOCK M Minute adjustment	00 – 59, [6] [Initial: 00 (0:00)]
24H/12H Time display mode	12H $\rightleftharpoons$ 24H, [6] [Initial: 24H]
CLK ADJ Clock adjustment	AUTO : [Initial]; The built-in clock is automatically adjusted using the CT (clock time) data in the RDS signal. OFF : Cancels.
AF-REG *5 Alternative frequency/ regionalization reception	When the received signals from the current FM RDS station or DAB service become weak... AF : [Initial]; Switches to another station (or service) (the programme may differ from the one currently received), [10, 19]. • The AF indicator lights up. AF REG : Switches to another station broadcasting the same programme. • The AF and REG indicators light up. OFF : Cancels (not selectable when “DAB AF” is set to “AF ON”).
PTY-STBY *5 PTY standby	Activates PTY Standby Reception with one of the PTY codes, [9]. OFF [Initial] → PTY codes, [10] → (back to the beginning)
TA VOL Traffic announcement volume	[Initial: VOL 15]; VOL 00 — VOL 30 or 50*4, [9]
P-SEARCH *5 Programme search	ON : Using the AF data, the unit tunes in to another frequency broadcasting the same programme as the original preset RDS station is if the preset station signals are not sufficient. OFF : [Initial]; Cancels.
DAB AF *6 Alternative frequency reception	AF ON : [Initial]; Traces the programme among DAB services and FM RDS stations, [10, 19]. AF OFF : Cancels.

*4 Depends on the amplifier gain control.

*5 Only for FM RDS stations.

*6 Displayed only when DAB tuner is connected.

To be continued...

Indications	Selectable settings, [reference page]	
DAB VOL * ₁ DAB volume adjustment	You can adjust the volume level (VOL -12 — VOL +12) of DAB tuner to match the FM sound level and store it in memory. [Initial: VOL 00]	
LEVEL Audio level meter	ON	: [Initial]; Activates the audio level indicator.
	OFF	: Cancels; sound mode indicator is shown.
DIMMER Dimmer	AUTO	: [Initial]; Dims the display when you turn on the headlights.
	ON	: Activates dimmer.
	OFF	: Cancels.
TEL Telephone muting	MUTING 1/MUTING 2 : Select either one which mutes the sounds while using the cellular phone.	
	OFF	: [Initial]; Cancels.
SCROLL * ₂ Scroll	ONCE	: [Initial]; Scrolls the disc information once.
	AUTO	: Repeats scrolling (5-second intervals in between).
	OFF	: Cancels.
	• Pressing D DISP for more than one second can scroll the display regardless of the setting.	
EXT IN * ₃ External input	CHANGER	: [Initial]; To use a JVC CD changer, [10], an Apple iPod, a JVC D. player, [17], and/or DAB tuner, [18].
	EXT IN	: To use another external component, [17].
AUX ADJ Auxiliary input level adjustment	A.ADJ 00 – A.ADJ 05 : Adjust the auxiliary input level to avoid the sudden increase of the output level when changing the source from external component connected to the AUX input jack on the control panel. [Initial: A.ADJ 00]	
TAG DISP Tag display	TAG ON	: [Initial]; Shows the ID3 tag while playing MP3/WMA tracks, [12].
	TAG OFF	: Cancels.
AMP GAIN Amplifier gain control	You can change the maximum volume level of this unit.	
	LOW PWR	: VOL 00 – VOL 30 (Select this if the maximum power of the speaker is less than 50 W to prevent them from damaging the speaker.)
	HIGH PWR	: [Initial]; VOL 00 – VOL 50

*₁ Displayed only when DAB tuner is connected.

*₂ Some characters or symbols will not be shown correctly (or will be blanked) on the display.

*₃ Displayed only when one of the following sources is selected—FM, AM, CD, or AUX IN.

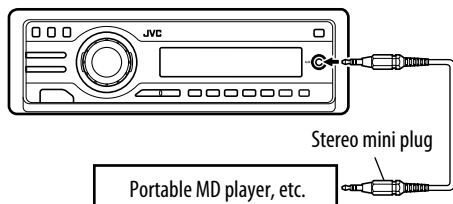
External component operations

You can connect an external component to...

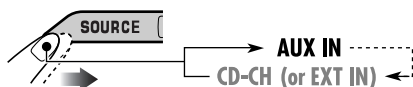
- CD changer jack on the rear using:
 - Line Input Adapter—KS-U57 (not supplied) or AUX Input Adapter—KS-U58 (not supplied) for any other components (except iPod and D. player).
 - Interface adapter for iPod®—KS-PD100 (not supplied) for controlling iPod.
 - D. player interface adapter—KS-PD500 (not supplied) for controlling D. player.
- AUX (auxiliary) input jack on the control panel.

For connection, see Installation/Connection Manual (separate volume).

Connecting an external component to the AUX input jack

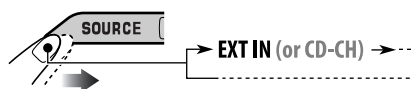


- 1 For selecting the external component connected to...
 - AUX input jack

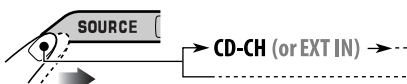


- CD changer jack on the rear using KS-U57 or KS-U58

If "EXT IN" does not appear, see page 16 and select the external input ("EXT IN").

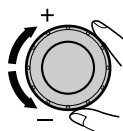


- CD changer jack on the rear using interface adapter for iPod—KS-PD100 or for D. player—KS-PD500



- 2 Turn on the connected component and start playing the source.

- 3 Adjust the volume.



- 4 Adjust the sound as you want. (See pages 13 and 14.)

To check the clock time while listening to an external component



AUX IN, EXT IN, or CD-CH* ↔ Clock

* See "While playing an MP3 or WMA disc" on page 12 for details.

DAB tuner operations

What is DAB system?

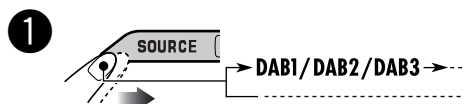
Digital Audio Broadcasting (DAB) can deliver digital quality sound without any annoying interference and signal distortion. Furthermore, it can carry text, pictures, and data. When transmitting, DAB combines several programmes (called “services”) to form one “ensemble.” In addition, each “service”—called “primary service”—can also be divided into its components (called “secondary service”). A typical ensemble has six or more programmes (services) broadcast at the same time.

By connecting the DAB tuner, this unit can do the following:

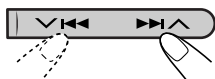
- Tracing the same programme automatically — Alternative Frequency Reception (see “DAB AF” on page 15).

It is recommended to use DAB tuner KT-DB1000 with your unit. If you have another DAB tuner, consult your JVC IN-CAR ENTERTAINMENT dealer.

- Refer also to the Instructions supplied for your DAB tuner.



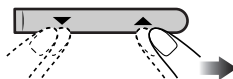
3 Start searching for an ensemble.



When an ensemble is received, searching stops.

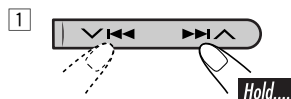
To stop searching, press the same button again.

4 Select a service (either primary or secondary) to listen to.

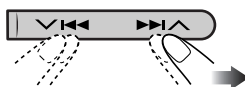


To tune in to an ensemble manually

Start searching for an ensemble, as in step **3** on the left column...



2 Select the desired ensemble frequencies.



Storing DAB services in memory

You can preset six DAB services (primary) for each band.

1 Select a service you want (see steps **1 to **4** above).**

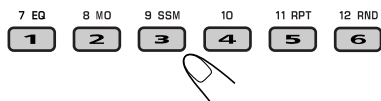
2 Select the preset number (1 – 6) you want to store into.



Preset number flashes for a while.

Tuning in to a preset DAB service

- 
- Select the preset DAB service (primary) number (1 – 6) you want.



If the selected primary service has some secondary services, pressing the same button again will tune in to the secondary services.

Tracing the same programme— Alternative Frequency Reception

You can keep listening to the same programme by activating the Alternative Frequency Reception.

• While receiving a DAB service:

When driving in an area where a service cannot be received, this unit automatically tunes in to another ensemble or FM RDS station, broadcasting the same programme.

• While receiving an FM RDS station:

When driving in an area where a DAB service is broadcasting the same programme as the FM RDS station is broadcasting, this unit automatically tunes in to the DAB service.

When shipped from the factory, Alternative Frequency Reception is activated.

To deactivate the Alternative Frequency Reception, see page 15.

To change the display information while tuning to an ensemble



Service name → Ensemble name → Channel number → Frequency → Clock → (back to the beginning)

More about this unit

Basic operations

Turning on the power

- By pressing SOURCE on the unit, you can also turn on the power. If the source is ready, playback also starts.

Turning off the power

- If you turn off the power while listening to a disc, disc play will start from where playback has been stopped previously, next time you turn on the power.

Selecting the sources

- When no disc is loaded in the unit, “CD” cannot be selected.
- “CD-CH” or “DAB” cannot be selected when the target component is not connected.

Tuner operations

Storing stations in memory

- During SSM search...
 - All previously stored stations are erased and stations are stored newly.
 - Received stations are preset in No. 1 (lowest frequency) to No. 6 (highest frequency).
 - When SSM is over, the station stored in No. 1 will be automatically tuned in.
- When storing a station manually, a previously preset station is erased when a new station is stored in the same preset number.

FM RDS operations

- Network-Tracking Reception requires two types of RDS signals—PI (Programme Identification) and AF (Alternative Frequency) to work correctly. Without receiving these data correctly, Network-Tracking Reception will not operate correctly.

To be continued...

- If a Traffic Announcement is received by TA Standby Reception, the volume level (TA VOL) automatically changes to the preset level.
- When Alternative Frequency Reception is activated (with AF selected), Network-Tracking Reception is also activated automatically. On the other hand, Network-Tracking Reception cannot be deactivated without deactivating Alternative Frequency Reception. (See page 15.)
- If you want to know more about RDS, visit «<http://www.rds.org.uk>».

Disc operations

Caution for DualDisc playback

- The Non-DVD side of a “DualDisc” does not comply with the “Compact Disc Digital Audio” standard. Therefore, the use of Non-DVD side of a DualDisc on this product may not be recommended.

General

- This unit has been designed to reproduce CDs/CD Texts, and CD-Rs (Recordable)/CD-RWs (Rewritable) in audio CD (CD-DA), MP3 and WMA formats.
- When a disc has been loaded, selecting “CD” for the playback source starts disc play.

Inserting a disc

- When a disc is inserted upside down, “PLEASE” and “EJECT” appear alternately on the display. Press ▲ to eject the disc.
- Do not insert 8 cm discs (single CD) and unusual shape discs (heart, flower, etc.) into the loading slot.

Playing a disc

- While fast-forwarding or reversing on an MP3 or WMA disc, you can only hear intermittent sounds.

Playing a CD-R or CD-RW

- Use only “finalized” CD-Rs or CD-RWs.
- This unit can play back only the files of the same type which is first detected if a disc includes both audio CD (CD-DA) files and MP3/WMA files.
- This unit can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- Some CD-Rs or CD-RWs may not play back on this unit because of their disc characteristics, and for the following causes:
 - Discs are dirty or scratched.
 - Moisture condensation occurs on the lens inside the unit.
 - The pickup lens inside the unit is dirty.
 - CD-R/CD-RW on which the files are written with “Packet Write” method.
 - There are improper recording conditions (missing data, etc.) or media conditions (stain, scratch, warp, etc.).
- CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.
- Do not use the following CD-Rs or CD-RWs:
 - Discs with stickers, labels, or protective seal stuck to the surface.
 - Discs on which labels can be directly printed by an ink jet printer.
 Using these discs under high temperatures or high humidities may cause malfunctions or damages to the unit.

Playing an MP3/WMA disc

- This unit can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).
- This unit can show the names of albums, artists (performer), and ID3 Tag (Version 1.0, 1.1, 2.2, 2.3, or 2.4) for MP3 files and for WMA files.
- This unit can display only one-byte characters. No other characters can be correctly displayed.
- This unit can play back MP3/WMA files meeting the conditions below:
 - Bit rate: 8 kbps — 320 kbps
 - Sampling frequency:
 - 48 kHz, 44.1 kHz, 32 kHz (for MPEG-1)
 - 24 kHz, 22.05 kHz, 16 kHz (for MPEG-2)
 - Disc format: ISO 9660 Level 1/ Level 2, Romeo, Joliet, Windows long file name
- The maximum number of characters for file/folder names vary among the disc format used (includes 4 extension characters—<.mp3> or <.wma>).
 - ISO 9660 Level 1: up to 12 characters
 - ISO 9660 Level 2: up to 31 characters
 - Romeo*: up to 128 (72) characters
 - Joliet*: up to 64 (36) characters
 - Windows long file name*: up to 128 (72) characters

* *The parenthetic figure is the maximum number of characters for file/folder names in case the total number of files and folders is 313 or more.*

- This unit can recognize the total of 512 files, of 200 folders, and of 8 hierarchies.
- This unit can play back the files recorded in VBR (variable bit rate).

The files recorded in VBR have a discrepancy in elapsed time display, and do not show the actual elapsed time. Especially, after performing the search function, this difference becomes noticeable.

- This unit cannot play back the following files:
 - MP3 files encoded with MP3i and MP3 PRO format.
 - MP3 files encoded in an unappropriated format.
 - MP3 files encoded with Layer 1/2.
 - WMA files encoded with lossless, professional, and voice format.
 - WMA files which are not based upon Windows Media® Audio.
 - WMA files copy-protected with DRM.
 - Files which have the data such as WAVE, ATRAC3, etc.
- The search function works but search speed is not constant.

Changing the source

- If you change the source, playback also stops (without ejecting the disc). Next time you select “CD” for the playback source, disc play starts from where it has been stopped previously.

Ejecting a disc

- If the ejected disc is not removed within 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust. (Disc will not play this time.)

General settings—PSM

- If you change the “AMP GAIN” setting from “HIGH PWR” to “LOW PWR” while the volume level is set higher than “VOL 30,” the unit automatically changes the volume level to “VOL 30.”

DAB tuner operations

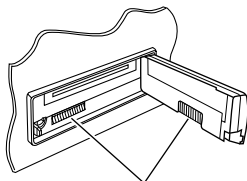
- Only primary DAB services can be presetted even when you store a secondary service.
- A previously preset DAB service is erased when a new DAB service is stored in the same preset number.

Maintenance

How to clean the connectors

Frequent detachment will deteriorate the connectors.

To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.



Connector

Moisture condensation

Moisture may condense on the lens inside the CD player in the following cases:

- After starting the heater in the car.
- If it becomes very humid inside the car.

Should this occur, the CD player may malfunction. In this case, eject the disc and leave the unit turned on for a few hours until the moisture evaporates.

How to handle discs

When removing a disc from its case, press down the center holder of the case and lift the disc out, holding it by the edges.

- Always hold the disc by the edges. Do not touch its recording surface.

When storing a disc into its case, gently insert the disc around the center holder (with the printed surface facing up).

- Make sure to store discs into the cases after use.

Center holder



To keep discs clean

A dirty disc may not play correctly. If a disc does become dirty, wipe it with a soft cloth in a straight line from center to edge.



- Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzene, etc.) to clean discs.

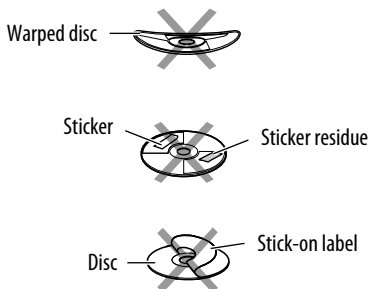
To play new discs

New discs may have some rough spots around the inner and outer edges. If such a disc is used, this unit may reject the disc.



To remove these rough spots, rub the edges with a pencil or ball-point pen, etc.

Do not use the following discs:



Troubleshooting

What appears to be trouble is not always serious. Check the following points before calling a service center.

	Symptoms	Remedies/Causes
General	• Sound cannot be heard from the speakers.	• Adjust the volume to the optimum level. • Check the cords and connections.
	• The unit does not work at all.	Reset the unit (see page 2).
FM/AM	• SSM automatic presetting does not work.	Store stations manually.
	• Static noise while listening to the radio.	Connect the aerial firmly.
Disc playback	• Disc cannot be played back.	Insert the disc correctly.
	• CD-R/CD-RW cannot be played back. • Tracks on the CD-R/CD-RW cannot be skipped.	• Insert a finalized CD-R/CD-RW. • Finalize the CD-R/CD-RW with the component which you used for recording.
	• Disc can be neither played back nor ejected.	• Unlock the disc (see page 12). • Eject the disc forcibly (see page 2).
	• Disc sound is sometimes interrupted.	• Stop playback while driving on rough roads. • Change the disc. • Check the cords and connections.
MP3/WMA playback	• Disc cannot be played back.	• Use a disc with MP3/WMA tracks recorded in the format compliant with ISO 9660 Level 1, Level 2, Romeo, or Joliet. • Add the extension code <.mp3> or <.wma> to the file names.
	• Noise is generated.	Skip to another track or change the disc. (Do not add the extension code <.mp3> or <.wma> to non-MP3 or WMA tracks.)

To be continued...

	Symptoms	Remedies/Causes
MP3/WMA playback	• A longer readout time is required (“CHECK” keeps flashing on the display).	Do not use too many hierarchies and folders.
	• Tracks do not play back in the order you have intended them to play.	Playback order is determined when the files are recorded.
	• Elapsed playing time is not correct.	This sometimes occurs during play. This is caused by how the tracks are recorded on the disc.
	• “NO FILES” appears on the display.	Insert a disc that contains MP3/WMA tracks.
	• Correct characters are not displayed (e.g. album name).	This unit can only display alphabets (upper case), numbers, and a limited number of symbols.
CD changer	• “NO DISC” appears on the display.	Insert a disc into the magazine.
	• “NO MAG” appears on the display.	Insert the magazine.
	• “RESET 8” appears on the display.	Connect this unit and the CD changer correctly and press the reset button of the CD changer.
	• “RESET 1” – “RESET 7” appears on the display.	Press the reset button of the CD changer.
	• The CD changer does not work at all.	Reset the unit (see page 2).
DAB	• “noSIGNAL” appears on the display.	Move to an area with stronger signals.
	• “RESET 8” appears on the display.	Connect this unit and the DAB tuner correctly and reset the unit (see page 2).
	• “ANTENANG” appears on the display.	Check the cords and connections.
	• The DAB tuner does not work at all.	Reconnect this unit and the DAB tuner correctly and reset the unit (see page 2).

- Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

AUDIO AMPLIFIER SECTION

Maximum Power Output:

Front: 50 W per channel

Rear: 50 W per channel

Continuous Power Output (RMS):

Front: 19 W per channel into 4 Ω , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.

Rear: 19 W per channel into 4 Ω , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.

Load Impedance: 4 Ω (4 Ω to 8 Ω allowance)

Tone Control Range:

Bass: ± 10 dB at 100 Hz

Treble: ± 10 dB at 10 kHz

Frequency Response: 40 Hz to 20 000 Hz

Signal-to-Noise Ratio: 70 dB

Line-Out Level/Impedance:

2.5 V/20 k Ω load (full scale)

Output Impedance: 1 k Ω

Other Terminals:

CD changer, Steering wheel remote input, AUX (auxiliary) input jack

TUNER SECTION

Frequency Range:

FM: 87.5 MHz to 108.0 MHz

AM: (MW) 522 kHz to 1 620 kHz

(LW) 144 kHz to 279 kHz

[FM Tuner]

Usable Sensitivity: 11.3 dBf (1.0 μ V/75 Ω)

50 dB Quieting Sensitivity:

16.3 dBf (1.8 μ V/75 Ω)

Alternate Channel Selectivity (400 kHz): 65 dB

Frequency Response: 40 Hz to 15 000 Hz

Stereo Separation: 35 dB

Capture Ratio: 1.5 dB

[MW Tuner]

Sensitivity: 20 μ V

Selectivity: 35 dB

[LW Tuner]

Sensitivity: 50 μ V

CD PLAYER SECTION

Type: Compact disc player

Signal Detection System: Non-contact optical pickup (semiconductor laser)

Number of Channels: 2 channels (stereo)

Frequency Response: 5 Hz to 20 000 Hz

Dynamic Range: 96 dB

Signal-to-Noise Ratio: 98 dB

Wow and Flutter: Less than measurable limit

MP3 Decoding Format:

MPEG1/2 Audio Layer 3

Max. Bit Rate: 320 kbps

WMA (Windows Media® Audio) Decoding

Format:

Max. Bit Rate: 192 kbps

GENERAL

Power Requirement:

Operating Voltage:

DC 14.4 V (11 V to 16 V allowance)

Grounding System: Negative ground

Allowable Operating Temperature:

0°C to +40°C

Dimensions (W $\times$ H $\times$ D):

Installation Size (approx.):

182 mm $\times$ 52 mm $\times$ 150 mm

Panel Size (approx.):

188 mm $\times$ 58 mm $\times$ 11 mm

Mass (approx.):

1.5 kg (excluding accessories)

Design and specifications are subject to change without notice.



Having TROUBLE with operation?

Please reset your unit

Refer to page of How to reset your unit

**Vous avez des PROBLÈMES de
fonctionnement?**

Réinitialisez votre appareil

Référez-vous à la page intitulée Comment réinitialiser votre appareil

JVC



EN, FR

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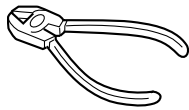
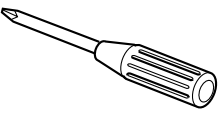
0905DTSMDTJEIN



KD-G521

Installation/Connection Manual Manuel d'installation/raccordement

GET0339-010A
[EX/EU]



0905DTSMdTJEIN
EN, FR

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ENGLISH

This unit is designed to operate on **12 V DC, NEGATIVE ground electrical systems**. If your vehicle does not have this system, a voltage inverter is required, which can be purchased at JVC IN-CAR ENTERTAINMENT dealers.

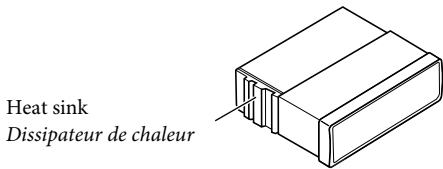
WARNINGS

To prevent short circuits, we recommend that you disconnect the battery's negative terminal and make all electrical connections before installing the unit.

- **Be sure to ground this unit to the car's chassis again after installation.**

Notes:

- Replace the fuse with one of the specified rating. If the fuse blows frequently, consult your JVC IN-CAR ENTERTAINMENT dealer.
- It is recommended to connect to the speakers with maximum power of more than 50 W (both at the rear and at the front, with an impedance of **4 Ω to 8 Ω**). If the maximum power is less than 50 W, change "AMP GAIN" setting to prevent the speakers from being damaged (see page 16 of the INSTRUCTIONS).
- To prevent short-circuit, cover the terminals of the UNUSED leads with insulating tape.
- The heat sink becomes very hot after use. Be careful not to touch it when removing this unit.



FRANÇAIS

Cet appareil est conçu pour fonctionner sur des sources de **courant continu de 12 V à masse NEGATIVE**. Si votre véhicule n'offre pas ce type d'alimentation, il vous faut un convertisseur de tension, que vous pouvez acheter chez un revendeur d'autoradios JVC.

AVERTISSEMENTS

Pour éviter tout court-circuit, nous vous recommandons de débrancher la borne négative de la batterie et d'effectuer tous les raccordements électriques avant d'installer l'appareil.

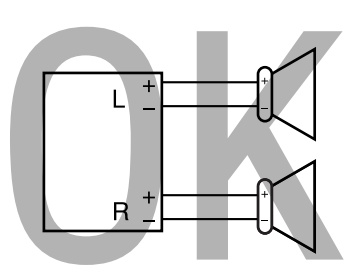
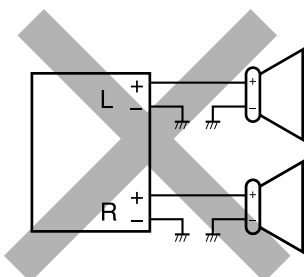
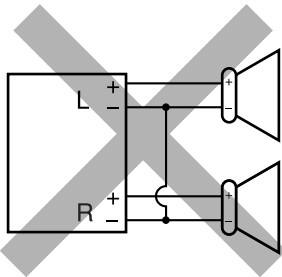
- **Assurez-vous de raccorder de nouveau la mise à la masse de cet appareil au châssis de la voiture après l'installation.**

Remarques:

- Remplacer le fusible par un de la valeur précisée. Si le fusible saute souvent, consulter votre revendeur d'autoradios JVC.
- Il est recommandé de connecter des enceintes avec une puissance de plus de 50 W (les enceintes arrière et les enceintes avant, avec une impédance comprise entre **4 Ω et 8 Ω**). Si la puissance maximum est inférieure à 50 W, changez "AMP GAIN" pour éviter d'endommager vos enceintes (voir page 16 du MANUEL D'INSTRUCTIONS).
- Pour éviter les court-circuits, couvrir les bornes des fils qui ne sont PAS UTILISÉS avec de la bande isolante.
- Le dissipateur de chaleur devient très chaud après usage. Faire attention de ne pas le toucher en retirant cet appareil.

PRECAUTIONS on power supply and speaker connections:

- **DO NOT connect the speaker leads of the power cord to the car battery; otherwise, the unit will be seriously damaged.**
- BEFORE connecting the speaker leads of the power cord to the speakers, check the speaker wiring in your car.



PRECAUTIONS sur l'alimentation et la connexion des enceintes:

- **NE CONNECTEZ PAS les fils d'enceintes du cordon d'alimentation à la batterie; sinon, l'appareil serait sérieusement endommagé.**
- AVANT de connecter les fils d'enceintes du cordon d'alimentation aux enceintes, vérifiez le câblage des enceintes de votre voiture.

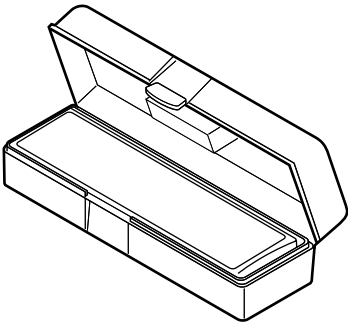
Parts list for installation and connection

The following parts are provided for this unit. After checking them, please set them correctly.

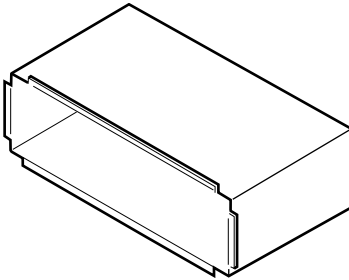
Liste des pièces pour l'installation et raccordement

Les pièces suivantes sont fournies avec cet appareil. Après vérification, veuillez les placer correctement.

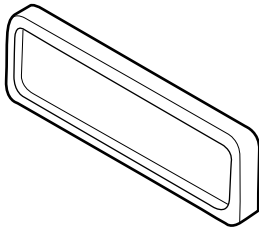
Ⓐ / Ⓑ
Hard case/Control panel
Etui de transport/Panneau de commande



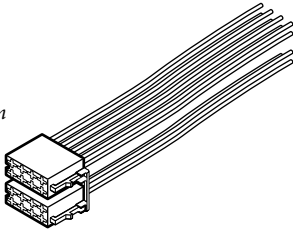
Ⓒ
Sleeve
Manchon



Ⓓ
Trim plate
Plaque d'assemblage



Ⓔ
Power cord
Cordon d'alimentation



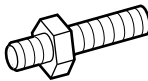
Ⓕ
Washer (ø5)
Rondelle (ø5)



Ⓖ
Lock nut (M5)
Ecrou d'arrêt (M5)



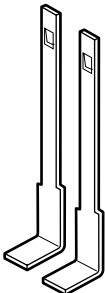
Ⓕ
Mounting bolt (M5 × 20 mm)
Boulon de montage (M5 × 20 mm)



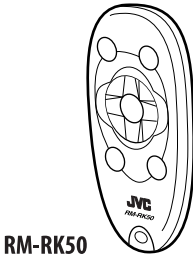
Ⓘ
Rubber cushion
Amortisseur en caoutchouc



Ⓙ
Handles
Poignées



Ⓚ
Remote controller
Télécommande



Ⓛ
Battery
Pile

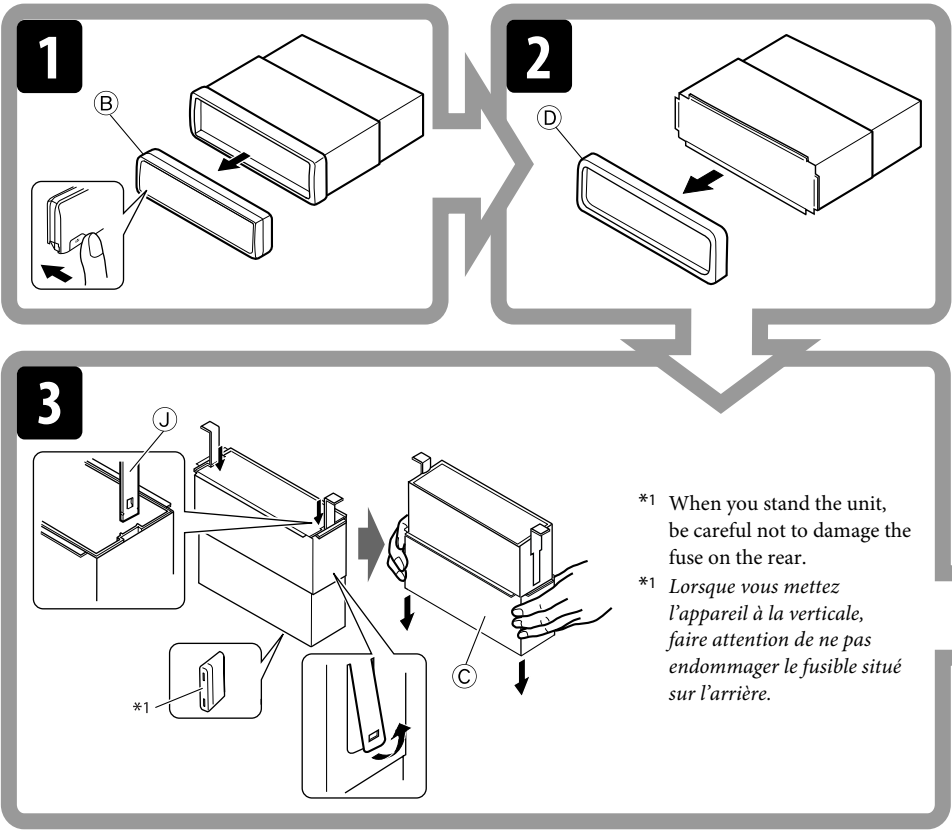


CR2025

INSTALLATION (IN-DASH MOUNTING)

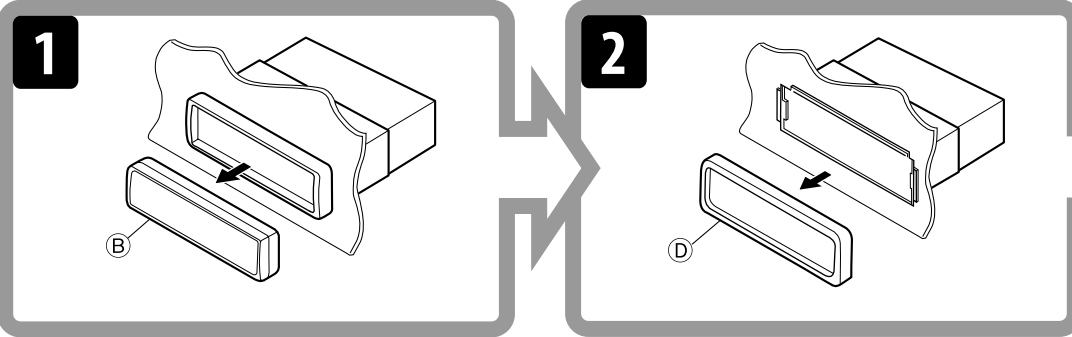
The following illustration shows a typical installation. If you have any questions or require information regarding installation kits, consult your JVC IN-CAR ENTERTAINMENT dealer or a company supplying kits.

- If you are not sure how to install this unit correctly, have it installed by a qualified technician.



Removing the unit

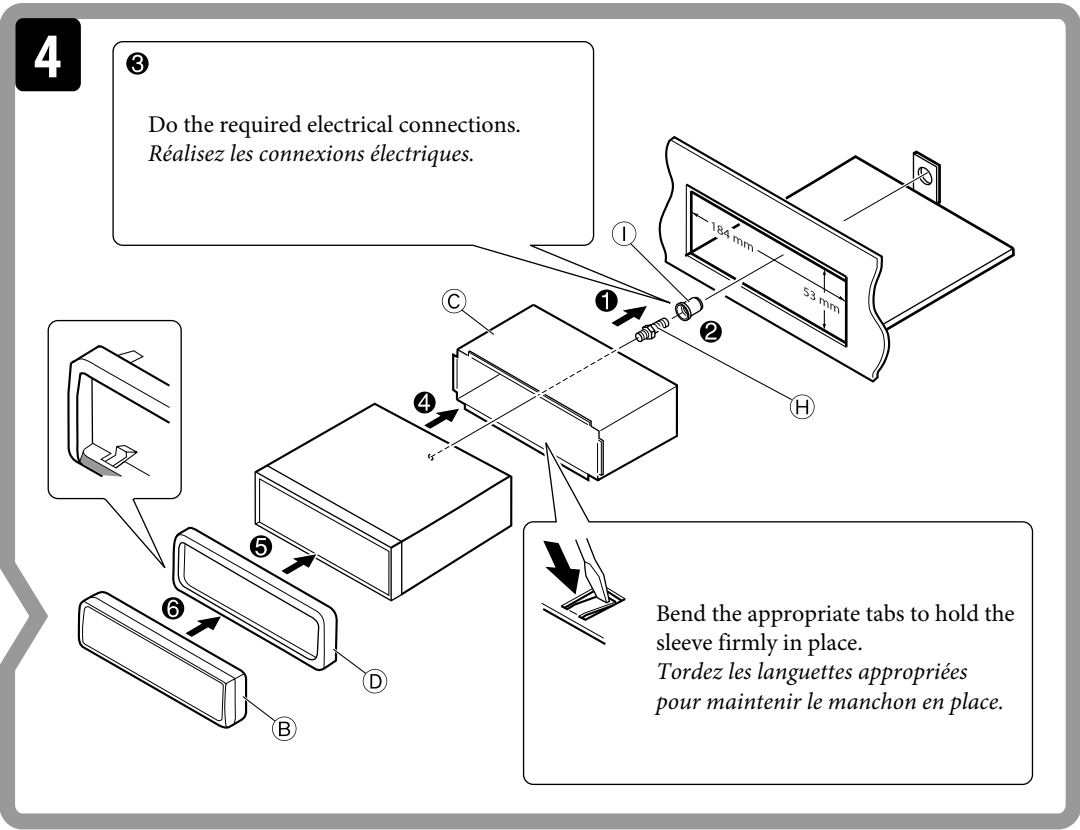
Before removing the unit, release the rear section.



INSTALLATION (MONTAGE DANS LE TABLEAU DE BORD)

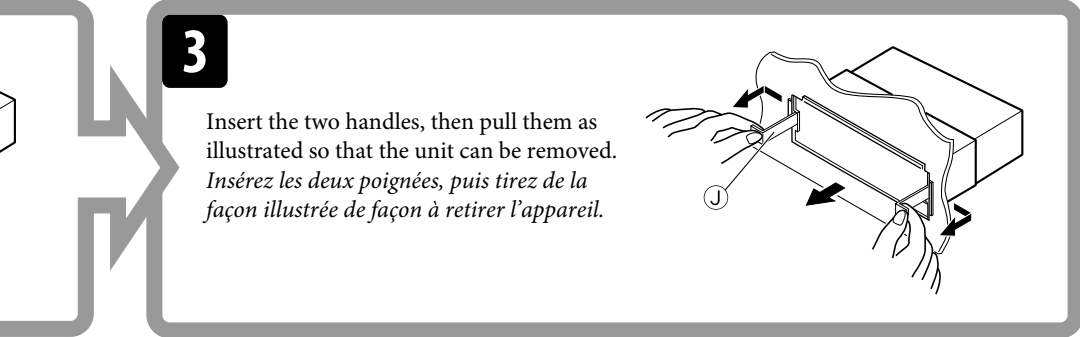
L'illustration suivante est un exemple d'installation typique. Si vous avez des questions ou avez besoin d'information sur des kits d'installation, consulter votre revendeur d'autoradios JVC ou une compagnie d'approvisionnement.

- Si l'on n'est pas sûr de pouvoir installer correctement cet appareil, le faire installer par un technicien qualifié.

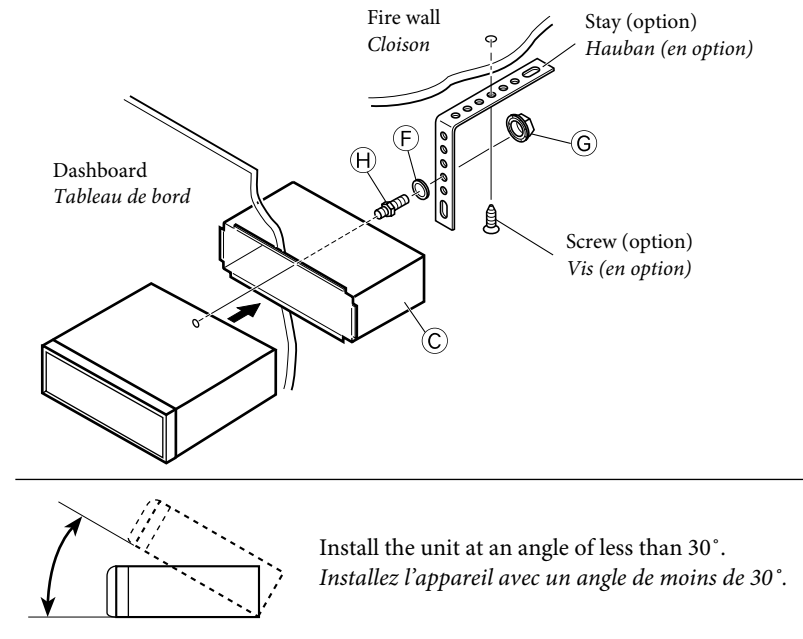


Retrait de l'appareil

Avant de retirer l'appareil, libérer la section arrière.

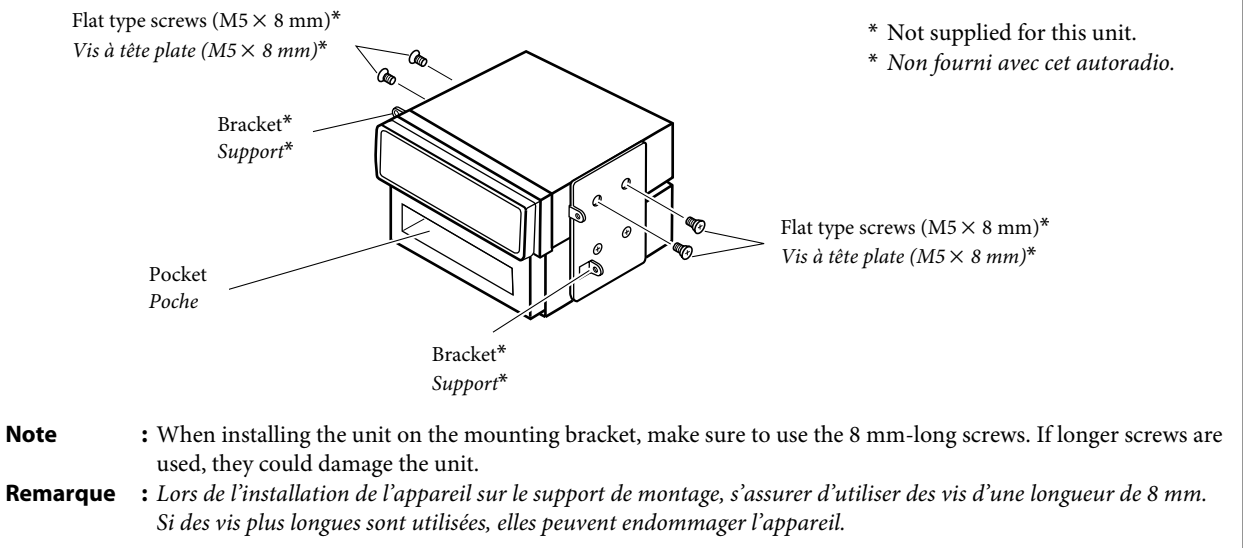


When using the optional stay / Lors de l'utilisation du hauban en option



When installing the unit without using the sleeve / Lors de l'installation de l'appareil scans utiliser de manchon

In a Toyota for example, first remove the car radio and install the unit in its place. Par exemple dans une Toyota, retirer d'abord l'autoradio et installer l'appareil à la place.



TROUBLESHOOTING

- **The fuse blows.**
 - * Are the red and black leads connected correctly?
- **Power cannot be turned on.**
 - * Is the yellow lead connected?
- **No sound from the speakers.**
 - * Is the speaker output lead short-circuited?
- **Sound is distorted.**
 - * Is the speaker output lead grounded?
 - * Are the “-” terminals of L and R speakers grounded in common?
- **Noise interfere with sounds.**
 - * Is the rear ground terminal connected to the car's chassis using shorter and thicker cords?
- **This unit becomes hot.**
 - * Is the speaker output lead grounded?
 - * Are the “-” terminals of L and R speakers grounded in common?
- **This unit does not work at all.**
 - * Have you reset your unit?

EN CAS DE DIFFICULTES

- **Le fusible saute.**
 - * Les fils rouge et noir sont-ils racordés correctement?
- **L'appareil ne peut pas être mise sous tension.**
 - * Le fil jaune est-elle raccordée?
- **Pas de son des enceintes.**
 - * Le fil de sortie d'enceinte est-il court-circuité?
- **Le son est déformé.**
 - * Le fil de sortie d'enceinte est-il à la masse?
 - * Les bornes “-” des enceintes gauche et droit sont-elles mises ensemble à la masse?
- **Interférence avec les sons.**
 - * La prise arrière de mise à la terre est-elle connectée au châssis de la voiture avec un cordon court et épais?
- **L'appareil devient chaud.**
 - * Le fil de sortie d'enceinte est-il à la masse?
 - * Les bornes “-” des enceintes gauche et droit sont-elles mises ensemble à la masse?
- **Cet appareil ne fonctionne pas du tout.**
 - * Avez-vous réinitialisé votre appareil?

ELECTRICAL CONNECTIONS

RACCORDEMENTS ELECTRIQUES

A Typical Connections / Raccordements typiques

Before connecting: Check the wiring in the vehicle carefully. Incorrect connection may cause serious damage to this unit.
The leads of the power cord and those of the connector from the car body may be different in color.

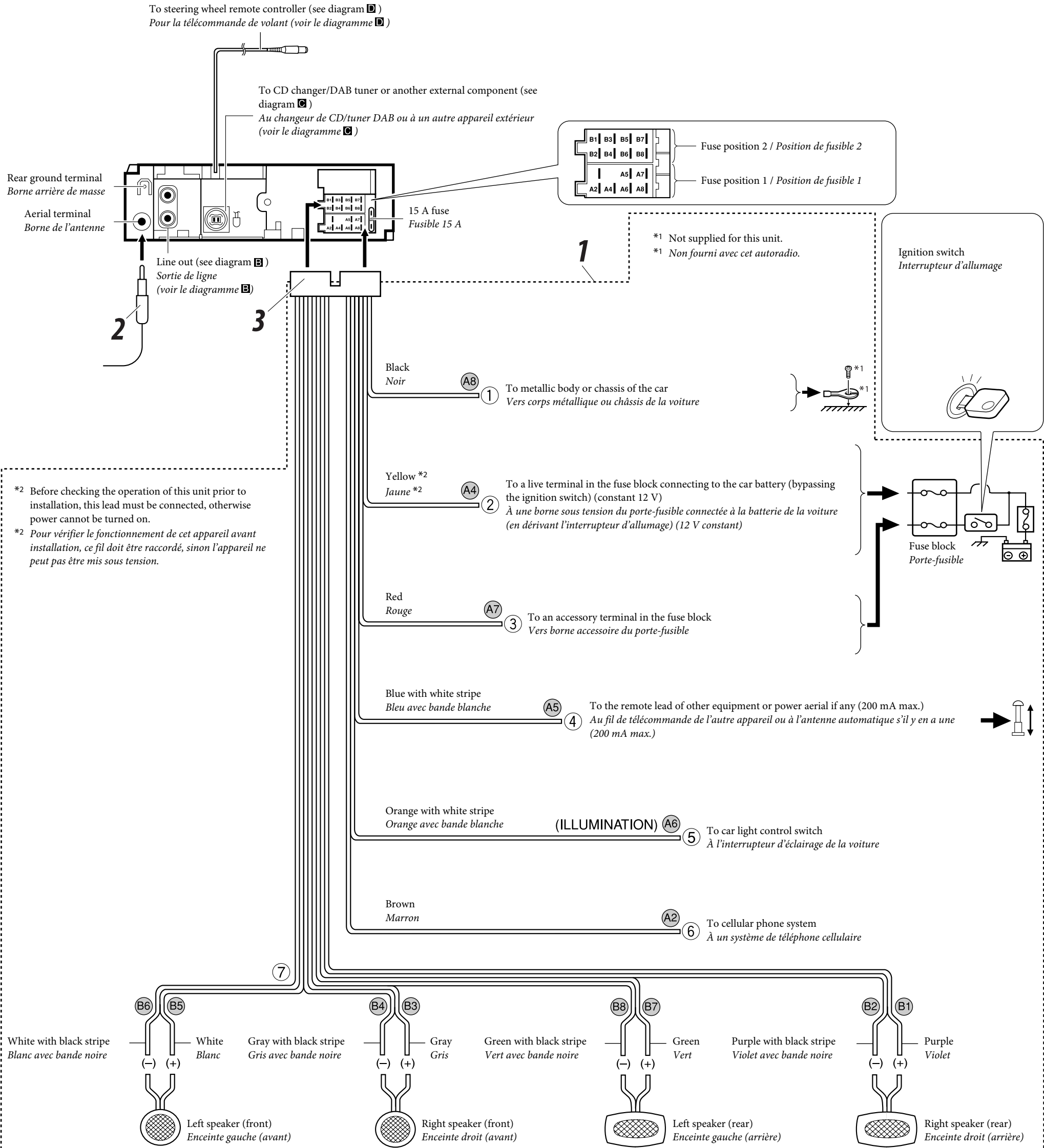
- 1 Connect the colored leads of the power cord in the order specified in the illustration below.
- 2 Connect the aerial cord.
- 3 Finally connect the wiring harness to the unit.

Note: If your vehicle does not have any accessory terminal, move the fuse from the fuse position 1 (initial position) to fuse position 2, and connect the red lead (A7) to the positive (+) battery terminal.
• The yellow lead (A4) is not used in this case.

Avant de commencer la connexion: Vérifiez attentivement le câblage du véhicule. Une connexion incorrecte peut endommager sérieusement l'appareil.
Le fil du cordon d'alimentation et ceux des connecteurs du châssis de la voiture peuvent être différents en couleur.

- 1 Connectez les fils colorés du cordon d'alimentation dans l'ordre spécifié sur l'illustration ci-dessous.
- 2 Connectez le cordon d'antenne.
- 3 Finalement, connectez le faisceau de fils à l'appareil.

Remarque: Si votre véhicule ne possède pas de borne accessoire, déplacez le fusible de la position de fusible 1 (position originale) à la position de fusible 2 et connectez le fil rouge (A7) à la borne positive (+) de la batterie.
• Le fil jaune (A4) n'est pas utilisé dans ce cas.



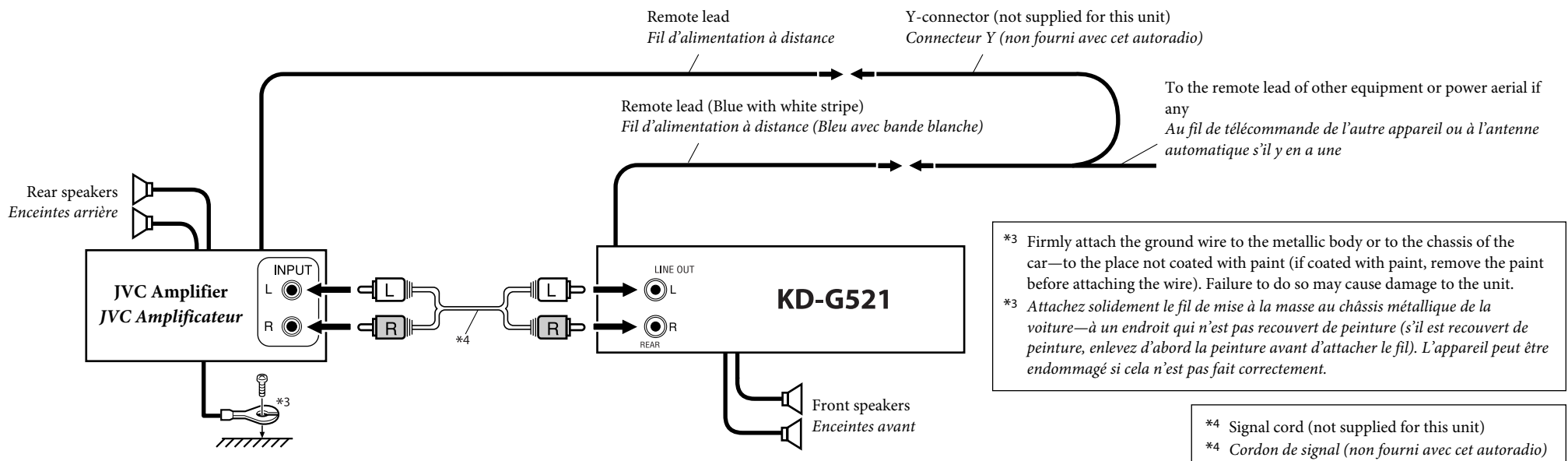
B Connecting the external amplifier / Connexion d'un amplificateur extérieur

You can connect an amplifier to upgrade your car stereo system.

- Connect the remote lead (blue with white stripe) to the remote lead of the other equipment so that it can be controlled through this unit.
- **Disconnect the speakers from this unit, connect them to the amplifier. Leave the speaker leads of this unit unused.**

Vous pouvez connecter un amplificateur pour améliorer votre système autoradio.

- Connectez le fil de commande à distance (bleu avec bande blanche) au fil de commande à distance de l'autre appareil de façon qu'il puisse être commandé via cet appareil.
- **Déconnectez les enceintes de cet appareil et connectez-les à l'amplificateur. Laissez les fils d'enceintes de cet appareil inutilisés.**



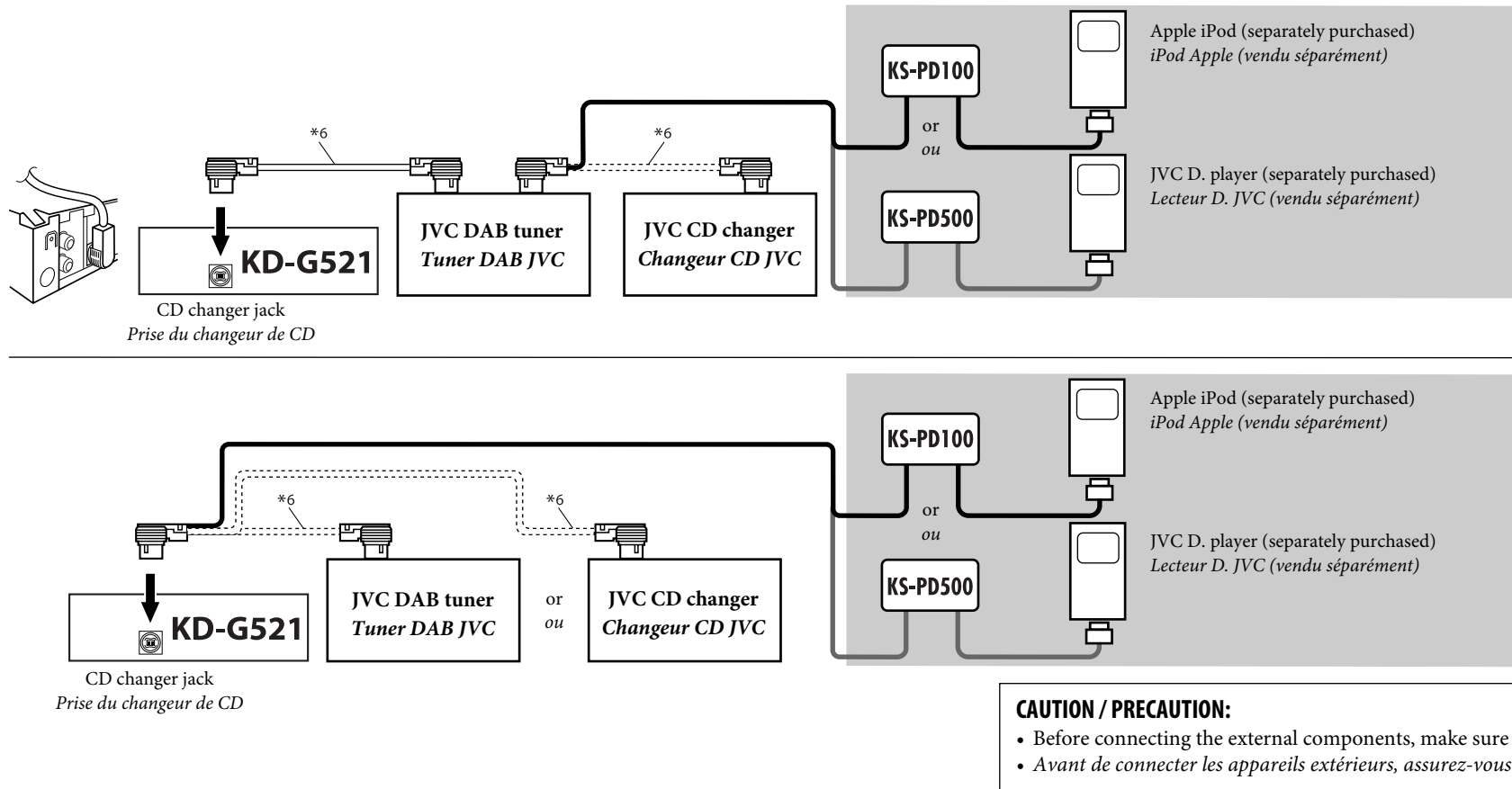
C Connecting the external components / Connexion des appareils extérieurs

- Set "CHANGER" for the external input setting (see page 16 of the INSTRUCTIONS.) / Choisissez "CHANGER" pour le réglage de l'entrée extérieure (référez-vous à la page 16 du MANUEL D'INSTRUCTIONS).

CD changer, DAB tuner, Apple iPod®, or JVC D. player / Changeur de CD, tuner DAB, iPod, Apple® ou lecteur D. JVC

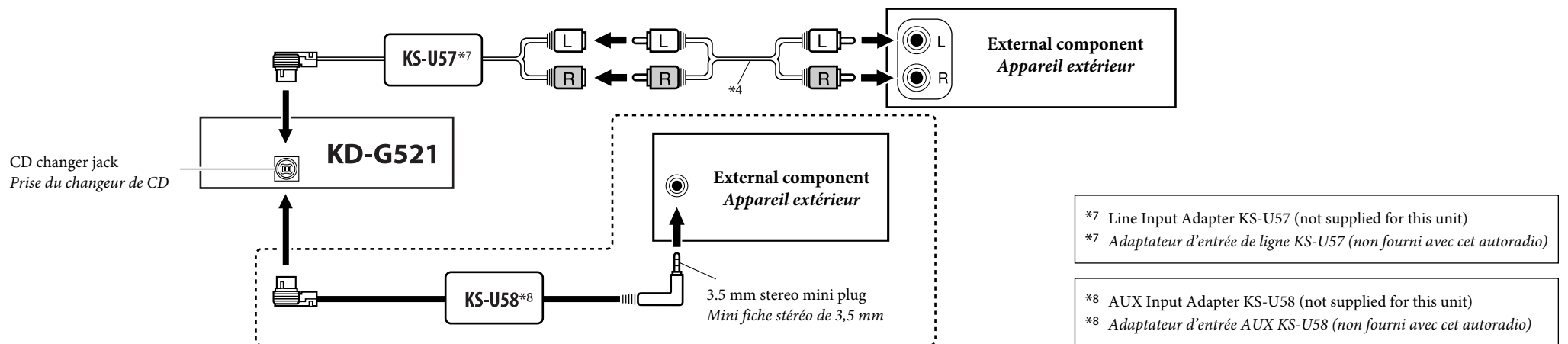
You can connect these components in series as illustrated below. The iPod®*5 or D. player can be connected using an interface adapter (not supplied)—KS-PD100 (for iPod) or KS-PD500 (for D. player).

Vous pouvez connecter ces appareils en série comme montrée sur l'illustration. Le iPod®5 ou le lecteur D. peut être connecté en utilisant un adaptateur d'interface (non fourni)—KS-PD100 (pour iPod) ou KS-PD500 (pour le lecteur D.).



- Set "EXT IN" for the external input setting (see page 16 of the INSTRUCTIONS.) / Choisissez "EXT IN" pour le réglage de l'entrée extérieure (référez-vous à la page 16 du MANUEL D'INSTRUCTIONS).

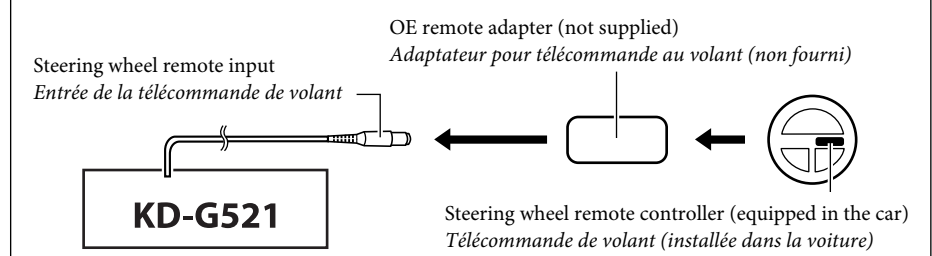
External Component / Appareil extérieur



D Connecting to the steering wheel remote controller / Connexion de la télécommande de volant

If your car is equipped with the steering wheel remote controller, you can operate this unit using the controller. To do it, a JVC's OE remote adapter (not supplied) which matches with your car is required. Consult your JVC IN-CAR ENTERTAINMENT dealer for details.

Si votre voiture est munie d'une télécommande de volant, vous pouvez commander cet autoradio en utilisant la télécommande. Pour le faire, un adaptateur pour télécommande au volant JVC (non fourni) correspondant à votre voiture est nécessaire. Consultez votre revendeur d'autoradio JVC pour les détails.

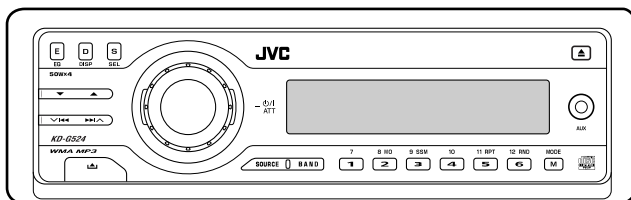
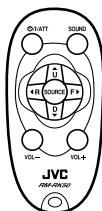
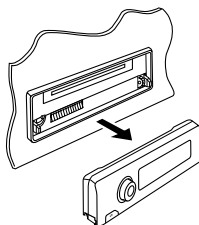


JVC



CD RECEIVER

KD-G524



WMA MP3



For canceling the display demonstration, see page 6.

For installation and connections, refer to the separate manual.

INSTRUCTIONS

GET0338-001A
[U]

Thank you for purchasing a JVC product.

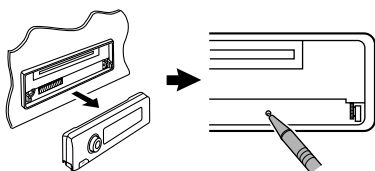
Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

IMPORTANT FOR LASER PRODUCTS

1. CLASS 1 LASER PRODUCT
2. **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
3. **CAUTION:** Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED OUTSIDE THE UNIT.

CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM.	ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling.	VARNING : Synlig og usynlig laserstråling når den öppnas och spårren är urkopplad. Beträkta ej strålen.	VARO : Avvartsa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteien kohdistumista suoraan itseesi. (f)
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How to reset your unit

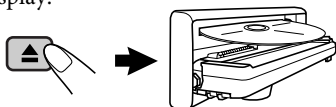


Your preset adjustments will also be erased.

How to forcibly eject a disc



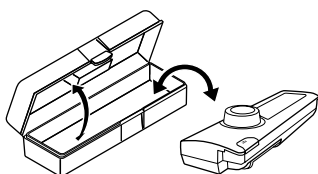
“PLEASE” and “EJECT” appear alternately on the display.



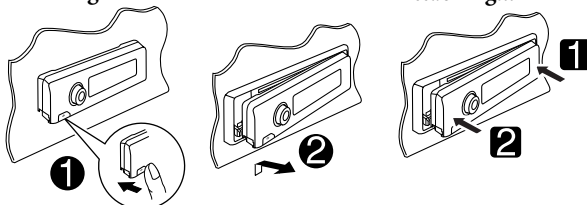
- If this does not work, reset your unit.
- Be careful not to drop the disc when it ejects.

How to detach/attach the control panel

Detaching...



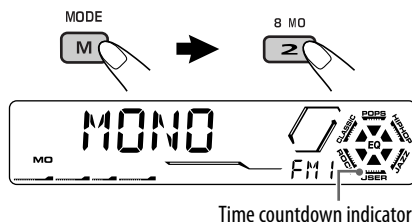
Attaching...



How to use the M MODE button

If you press M MODE, the unit goes into functions mode, then the number buttons and ▲/▼ buttons work as different function buttons.

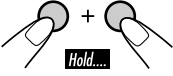
Ex.: When number button 2 works as MO (monaural) button.



To use these buttons for their original functions again after pressing M MODE, wait for 5 seconds without pressing any of these buttons until the functions mode is cleared or press M MODE again.

How to read this manual

- Button operations are mainly explained with the illustrations in the table below.
- Some related tips and notes are explained in “More about this unit” (see pages 16 and 17).

	Press briefly.	
	Press repeatedly.	
	Press either one.	
	Press and hold until your desired response begins.	
	Press and hold both buttons at the same time.	

The following marks are used to indicate...

 : Built-in CD player operations.

 : External CD changer operations.

 : Indicator displayed for the corresponding operation.

Warning:

If you need to operate the unit while driving, be sure to look ahead carefully or you may be involved in a traffic accident.

Caution on volume setting:

Discs produce very little noise compared with other sources. Lower the volume before playing a disc to avoid damaging the speakers by the sudden increase of the output level.

CONTENTS

Control panel	4
Remote controller — RM-RK50	5
Getting started	6
Basic operations	6
Radio operations	7
Disc operations	8
Playing a disc in the unit	8
Playing discs in the CD changer	8
Sound adjustments	11
General settings — PSM	12
Title assignment	14
External component operations	15
More about this unit	16
Maintenance	18
Troubleshooting	19
Specifications	21

For safety...

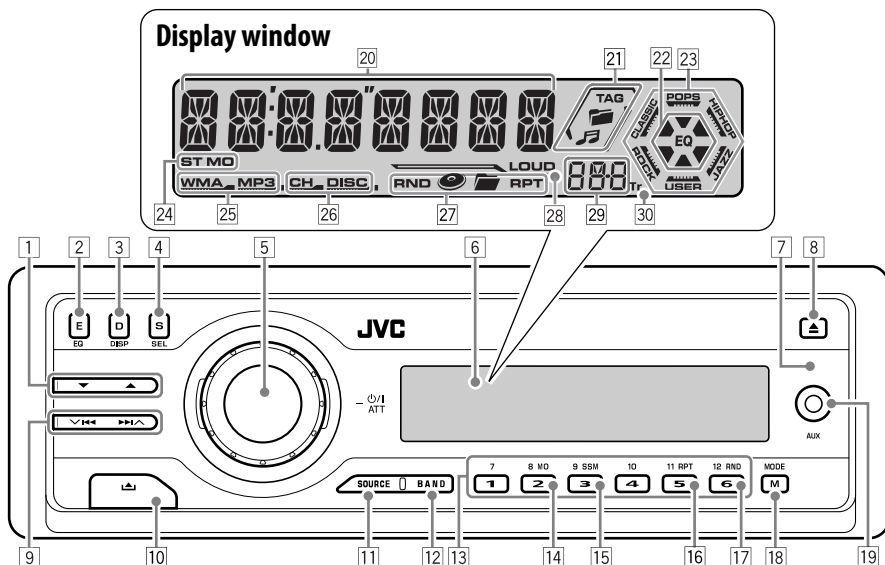
- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operations.

Temperature inside the car...

If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.

Control panel

Parts identification

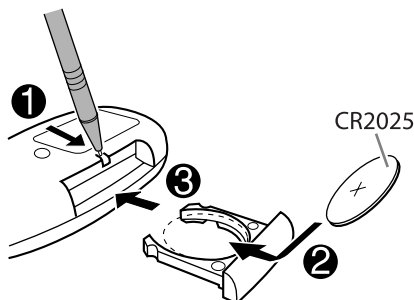


- 1 ▲ (up) / ▼ (down) buttons
- 2 E EQ (equalizer) button
- 3 D DISP (display) button
- 4 S SEL (select) button
- 5
 - Control dial
 - ϕ /I ATT (standby/on attenuator) button
- 6 Display window
- 7 Remote sensor
 - **DO NOT** expose the remote sensor to strong light (direct sunlight or artificial lighting).
- 8 ▲ (eject) button
- 9 ▼ |◀◀/▶▶| ▲ buttons
- 10 (control panel release) button
- 11 SOURCE button
- 12 BAND button
- 13 Number buttons
- 14 MO (monaural) button
- 15 SSM (Strong-station Sequential Memory) button
- 16 RPT (repeat) button
- 17 RND (random) button
- 18 M MODE button
- 19 AUX (auxiliary) input jack

Display window

- 20 Main display
- 21 Disc information indicators—TAG (ID3 Tag), (folder), (track/file)
- 22 EQ (equalizer) indicator
- 23 Sound mode (C-EQ: custom equalizer) indicators—ROCK, CLASSIC, POPS, HIP HOP, JAZZ, USER
 - also works as the time countdown indicator and level meter during play (see page 13).
- 24 Tuner reception indicators—ST (stereo), MO (monaural)
- 25 Disc type indicators—WMA, MP3
- 26 Playback source indicators—
 - CH: *Lights up only when CD-CH is selected as the playback source.*
 - DISC: *Lights up for the built-in CD player.*
- 27 Playback mode / item indicators—RND (random), (disc), (folder), RPT (repeat)
- 28 LOUD (loudness) indicator
- 29 Source display / Volume level indicator
- 30 Tr (track) indicator

Installing the lithium coin battery (CR2025)

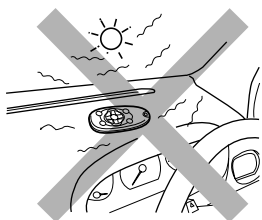


Aim the remote controller directly at the remote sensor on the unit. Make sure there is no obstacle in between.

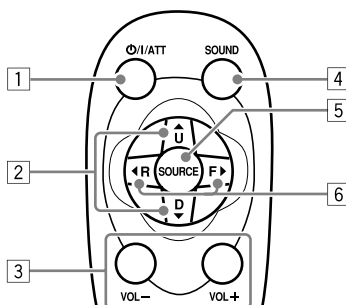
Warning:

- Do not install any battery other than CR2025 or its equivalent; otherwise, it may explode.
- Store the battery in a place where children cannot reach to avoid risk of accident.
- To prevent the battery from over-heating, cracking, or starting a fire:
 - Do not recharge, short, disassemble, heat the battery, or dispose of it in a fire.
 - Do not leave the battery with other metallic materials.
 - Do not poke the battery with tweezers or similar tools.
 - Wrap the battery with tape and insulate when throwing away or saving it.

Caution:



Main elements and features

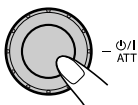


- 1** **⏻/I/ATT** (standby/on/attenuator) button
 - Turns the power on if pressed briefly or attenuates the sound when power is on.
 - Turns the power off if pressed and held.
- 2** **▲ U (up) / D (down) ▼** buttons
 - Changes the FM/AM bands with ▲ U only.
 - Changes the preset stations with D ▼ only.
 - Changes the folder of the MP3/WMA discs.
 - While playing an MP3 disc on an MP3-compatible CD changer:
 - Changes the disc if pressed briefly.
 - Changes the folder if pressed and held.
- 3** **VOL - / VOL +** buttons
 - Adjusts the volume level.
- 4** **SOUND** button
 - Selects the sound mode (C-EQ: custom equalizer).
- 5** **SOURCE** button
 - Selects the source.
- 6** **◀ R (reverse) / F (forward) ▶** buttons
 - Searches for stations if pressed briefly.
 - Fast-forwards or reverses the track if pressed and held.
 - Changes the tracks of the disc if pressed briefly.

Getting started

Basic operations

- 1 Turn on the power.



- 2



- Select “CD-CH” when using an Apple iPod® or a JVC D. player (see page 15).

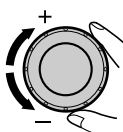
iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.

* You cannot select these sources if they are not ready.

- 3 For FM/AM tuner



- 4 Adjust the volume.



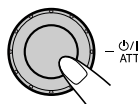
Volume level appears.



Volume level indicator

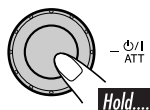
- 5 Adjust the sound as you want. (See pages 11 and 12.)

To drop the volume in a moment (ATT)



To restore the sound, press it again.

To turn off the power



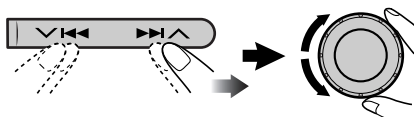
Basic settings

- See also “General settings — PSM” on pages 12 and 13.

- 1



- 2



- 1 Canceling the display demonstrations

Select “DEMO,” then “DEMO OFF.”

- 2 Setting the clock

Select “CLOCK H” (hour), then adjust the hour.

Select “CLOCK M” (minute), then adjust the minute.

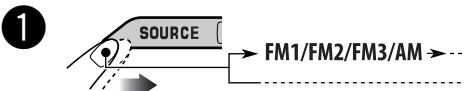
- 3 Finish the procedure.



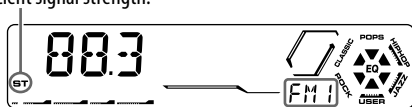
To check the current clock time when the power is turned off



Radio operations

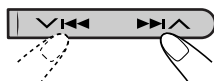


Lights up when receiving an FM stereo broadcast with sufficient signal strength.



Selected band appears.

3 Start searching for a station.

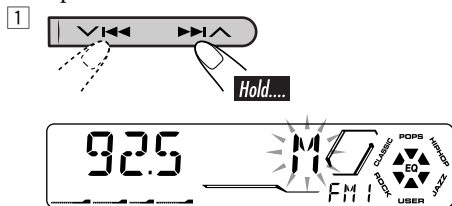


When a station is received, searching stops.

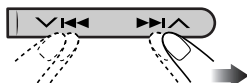
To stop searching, press the same button again.

To tune in to a station manually

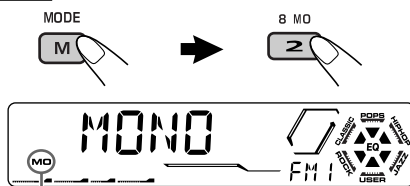
In step 3 above...



2 Select the desired station frequencies.



When an FM stereo broadcast is hard to receive



Lights up when monaural mode is activated.

Reception improves, but stereo effect will be lost.

To restore the stereo effect, repeat the same procedure. "MONO OFF" appears and the MO indicator goes off.

Storing stations in memory

You can preset six stations for each band.

FM station automatic presetting—SSM (Strong-station Sequential Memory)

1 Select the FM band (FM1 – FM3) you want to store into.

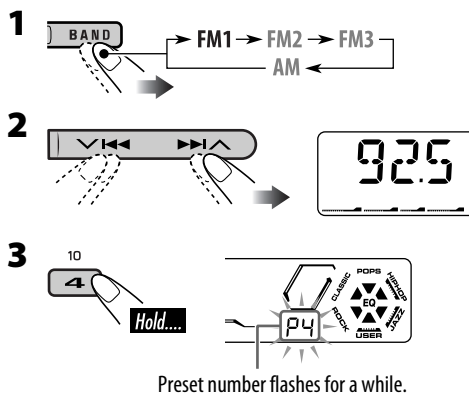


"SSM" flashes, then disappears when automatic presetting is over.

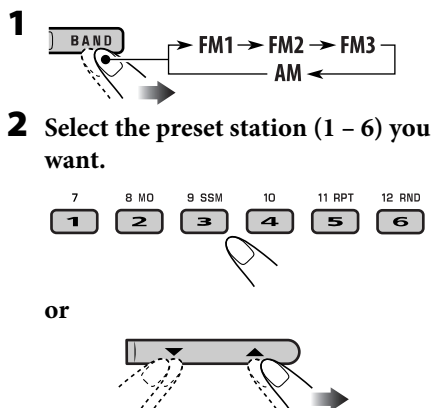
Local FM stations with the strongest signals are searched and stored automatically in the FM band.

Manual presetting

Ex.: Storing FM station of 92.5 MHz into preset number 4 of the FM1 band.



Listening to a preset station



To check the other information while listening to an FM or AM station

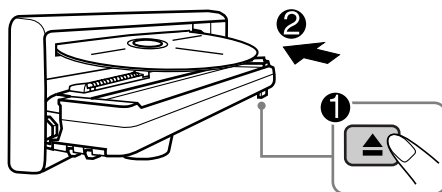


Clock → Station name* → Frequency →
(back to the beginning)

* If no title is assigned to a station, “NO NAME” appears. To assign a title to a station, see page 14.

Disc operations

Playing a disc in the unit



All tracks will be played repeatedly until you change the source or eject the disc.

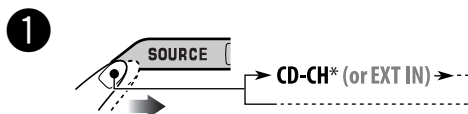
To stop play and eject the disc



Playing discs in the CD changer

All discs in the magazine will be played repeatedly until you change the source.

- Ejecting the magazine will also stop playing.

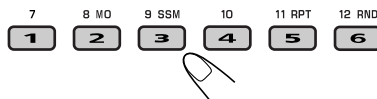


* If you have changed “EXT IN” setting to “EXT IN” (see page 13), you cannot select the CD changer.

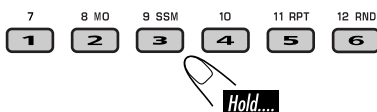
See also page 15 when using an iPod or JVC D. player.

2 Select a disc.

For disc number from 01 – 06:



For disc number from 07 – 12:



About MP3 and WMA discs

MP3 and WMA “tracks” (words “file” and “track” are used interchangeably) are recorded in “folders.”

About the CD changer

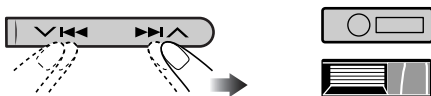
It is recommended to use a JVC MP3-compatible CD changer with your unit.

- You can also connect other CH-X series CD changers (except CH-X99 and CH-X100). These units are not compatible with MP3 discs.
- You cannot play any WMA disc in the CD changer.
- You cannot use the KD-MK series CD changers with this unit.
- Disc text information recorded in the CD Text can be displayed when a JVC CD Text compatible CD changer is connected.

To fast-forward or reverse the track



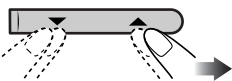
To go to the next or previous tracks



To go to the next or previous folders (only for MP3 or WMA discs)

For MP3 discs:  

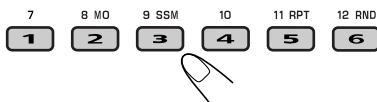
For WMA discs: 



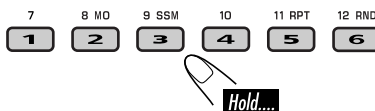
To locate a particular track (for CD) or folder (for MP3 or WMA discs) directly



To select a number from 01 – 06:

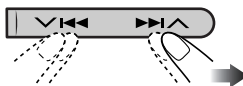


To select a number from 07 – 12:



- To use folder search on MP3/WMA discs, it is required that folders are assigned with 2-digit numbers at the beginning of their folder names—01, 02, 03, and so on.

- To select a particular track in a folder (for MP3 or WMA disc):



Other main functions

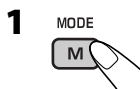
■ Skipping a track quickly during play



**Only possible on JVC
MP3-compatible CD changer**

- For MP3 or WMA disc, you can skip a track within the same folder.

Ex.: To select track 32 while playing track 6



Each time you press the button, you can skip 10 tracks.

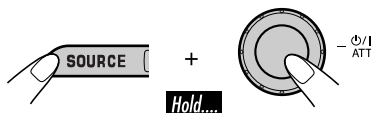
- After the last track, the first track will be selected and vice versa.



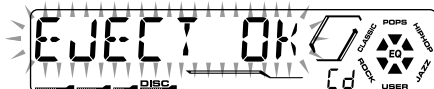
■ Prohibiting disc ejection



You can lock a disc in the loading slot.



To cancel the prohibition, repeat the same procedure.



Changing the display information

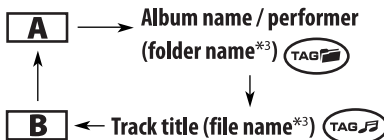


■ While playing an audio CD or a CD Text

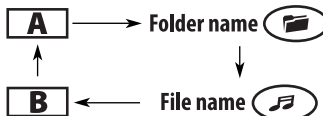


■ While playing an MP3 or WMA*2 disc

- When "TAG DISP" is set to "TAG ON"
(see page 13)



- When "TAG DISP" is set to "TAG OFF"



- A** : Clock with the current track number
- B** : Elapsed playing time with the current track number

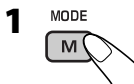
*1 If the current disc is an audio CD, "NO NAME" appears.

*2 Only for the built-in CD player.

*3 If an MP3/WMA file does not have ID3 tags, folder name and file name appear. In this case, the TAG indicator will not light up.

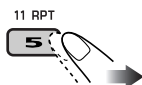
Selecting the playback modes

You can use only one of the following playback modes at a time.



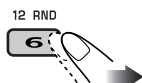
2 Select your desired playback mode.

■ Repeat play



Mode	Plays repeatedly
TRK RPT	: The current track.
FLDR RPT *1	: All tracks of the current folder.
DISC RPT *2	: All tracks of the current disc.
RPT OFF	: Cancels.

■ Random play



Mode	Plays at random
FLDR RND *1	: All tracks of the current folder, then tracks of the next folder and so on.
DISC RND	: All tracks of the current disc.
MAG RND *2	: All tracks of the inserted discs.
RND OFF	: Cancels.

*1 Only while playing an MP3 or WMA disc.

*2 Only while playing discs in the CD changer.

Sound adjustments

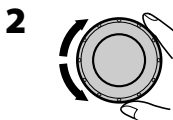
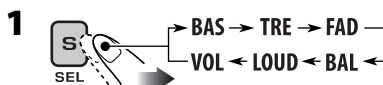
You can select a preset sound mode suitable to the music genre (C-EQ: custom equalizer).



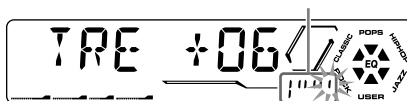
Preset values	BAS (bass)	TRE (treble)	LOUD (loudness)
USER (Flat sound)	00	00	OFF
ROCK (Rock or disco music)	+03	+01	ON
CLASSIC (Classical music)	+01	-02	OFF
POPS (Light music)	+04	+01	OFF
HIP HOP (Funk or rap music)	+02	00	ON
JAZZ (Jazz music)	+02	+03	OFF

Adjusting the sound

You can adjust the sound characteristics to your preference.



Indication pattern changes as you adjust the level.



Ex.: When "TRE" is selected

To be continued...

Indication [Range]

BAS*¹ (bass)

Adjust the bass. [-06 to +06]

TRE*¹ (treble)

Adjust the treble. [-06 to +06]

FAD*² (fader)

Adjust the front and rear speaker balance.
[R06 to F06]

BAL (balance)

Adjust the left and right speaker balance.
[L06 to R06]

LOUD*¹ (loudness)

Boost low and high frequencies to produce
a well-balanced sound at low volume level.
[LOUD ON or LOUD OFF]

VOL (volume)

Adjust the volume. [00 to 30 or 50*³]

*¹ When you adjust the bass, treble, or loudness,
the adjustment you have made is stored for
the currently selected sound mode (C-EQ)
including "USER."

*² If you are using a two-speaker system, set the
fader level to "00."

*³ Depending on the amplifier gain control
setting. (See page 13 for details.)

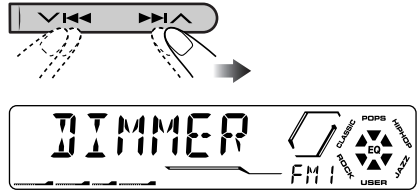
General settings — PSM

You can change PSM (Preferred Setting Mode)
items listed in the table that follows.

1

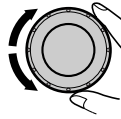


2 Select a PSM item.



Ex.: When you select "DIMMER"

3 Adjust the PSM item selected.



4 Repeat steps **2** and **3** to adjust the
other PSM items if necessary.

5 Finish the procedure.



Indications	Selectable settings, [reference page]
DEMO Display demonstration	DEMO ON : [Initial]; Display demonstration will be activated automatically if no operation is done for about 20 seconds, [6]. DEMO OFF : Cancels.
CLOCK H Hour adjustment	1 – 12, [6] [Initial: 1 (1:00)]
CLOCK M Minute adjustment	00 – 59, [6] [Initial: 00 (1:00)]
LEVEL Audio level meter	ON : [Initial]; Activates the audio level indicator. OFF : Cancels; sound mode indicator is shown.
DIMMER Dimmer	AUTO : [Initial]; Dims the display when you turn on the headlights. ON : Activates dimmer. OFF : Cancels.
SCROLL *1 Scroll	ONCE : [Initial]; Scrolls the disc information once. AUTO : Repeats scrolling (5-second intervals in between). OFF : Cancels. • Pressing D DISP for more than one second can scroll the display regardless of the setting.
EXT IN *2 External input	CHANGER : [Initial]; To use a JVC CD changer, [8], an Apple iPod or a JVC D. player, [15]. EXT IN : To use another external component, [15].
AUX ADJ Auxiliary input level adjustment	A.ADJ 00 – A.ADJ 05 : Adjust the auxiliary input level to avoid the sudden increase of the output level when changing the source from external component connected to the AUX input jack on the control panel. [Initial: A.ADJ 00]
TAG DISP Tag display	TAG ON : [Initial]; Shows the ID3 tag while playing MP3/WMA tracks, [10]. TAG OFF : Cancels.
AMP GAIN Amplifier gain control	You can change the maximum volume level of this unit. LOW PWR : VOL 00 – VOL 30 (Select this if the maximum power of the speaker is less than 50 W to prevent them from damaging the speaker.) HIGH PWR : [Initial]; VOL 00 – VOL 50

*1 Some characters or symbols will not be shown correctly (or will be blanked) on the display.

*2 Displayed only when one of the following sources is selected—FM, AM, CD, or AUX IN.

Title assignment

You can assign titles to station frequencies and CDs (both in the unit and the CD changer).

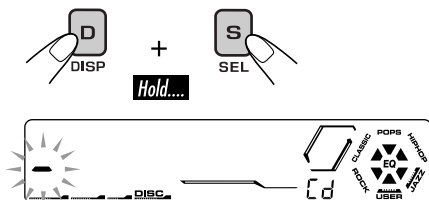
Sources	Maximum number of characters
FM/AM tuner	Up to 8 characters (up to 30 station frequencies including both FM and AM)
CDs/CD-CH	Up to 32 characters (up to 30 discs)

* You cannot assign a title to a CD Text or an MP3/WMA disc.

1 Select the sources.

- For FM/AM tuner: Tune into a station.
- For CDs in this unit: Insert a CD.
- For CDs in the CD changer: Select "CD-CH," then select a disc number.

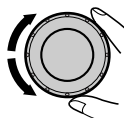
2 Enter the title assignment mode.



Ex.: When you select "CD" as the source

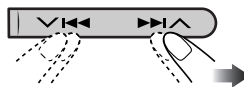
3 Assign a title.

1 Select a character.



A	B	C	D	E	F	G	H	I	J	K	L	M	N
O	P	Q	R	S	T	U	V	W	X	Y	Z	0	1
2	3	4	5	6	7	8	9	-	/	<	>	space	

2 Move to the next (or previous) character position.



3 Repeat steps 1 and 2 until you finish entering the title.

4 Finish the procedure.



To erase the entire title

In step 2 on the left...



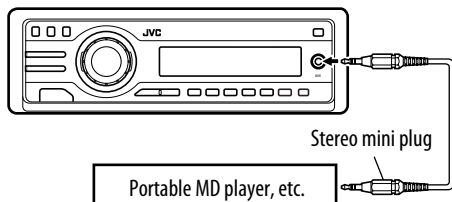
External component operations

You can connect an external component to...

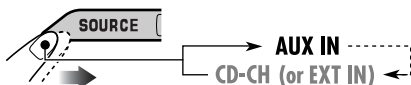
- CD changer jack on the rear using:
 - Line Input Adapter—KS-U57 (not supplied) or AUX Input Adapter—KS-U58 (not supplied) for any other components (except iPod and D. player).
 - Interface adapter for iPod®—KS-PD100 (not supplied) for controlling iPod.
 - D. player interface adapter—KS-PD500 (not supplied) for controlling D. player.
- AUX (auxiliary) input jack on the control panel.

For connection, see Installation/Connection Manual (separate volume).

Connecting an external component to the AUX input jack

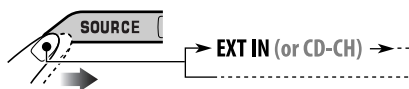


- 1 For selecting the external component connected to...
 - AUX input jack

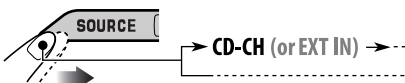


- CD changer jack on the rear using KS-U57 or KS-U58

If "EXT IN" does not appear, see page 13 and select the external input ("EXT IN").

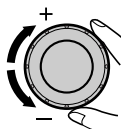


- CD changer jack on the rear using interface adapter for iPod—KS-PD100 or for D. player—KS-PD500



- 2 Turn on the connected component and start playing the source.

- 3 Adjust the volume.



- 4 Adjust the sound as you want. (See pages 11 and 12.)

To check the other information while listening to an external component



Clock ↔ AUX IN, EXT IN, or CD-CH*

* See "While playing an MP3 or WMA disc" on page 10 for details.

More about this unit

Basic operations

Turning on the power

- By pressing SOURCE on the unit, you can also turn on the power. If the source is ready, playback also starts.

Turning off the power

- If you turn off the power while listening to a disc, disc play will start from where playback has been stopped previously, next time you turn on the power.

Selecting the sources

- When no disc is loaded in the unit, “CD” cannot be selected.
- “CD-CH” cannot be selected when the target component is not connected.

Tuner operations

Storing stations in memory

- During SSM search...
 - All previously stored stations are erased and stations are stored newly.
 - Received stations are preset in No. 1 (lowest frequency) to No. 6 (highest frequency).
 - When SSM is over, the station stored in No. 1 will be automatically tuned in.
- When storing a station manually, a previously preset station is erased when a new station is stored in the same preset number.

Disc operations

Caution for DualDisc playback

- The Non-DVD side of a “DualDisc” does not comply with the “Compact Disc Digital Audio” standard. Therefore, the use of Non-DVD side of a DualDisc on this product may not be recommended.

General

- This unit has been designed to reproduce CDs/CD Texts, and CD-Rs (Recordable)/CD-RWs (Rewritable) in audio CD (CD-DA), MP3 and WMA formats.
- When a disc has been loaded, selecting “CD” for the playback source starts disc play.

Inserting a disc

- When a disc is inserted upside down, “PLEASE” and “EJECT” appear alternately on the display. Press ▲ to eject the disc.
- Do not insert 8 cm discs (single CD) and unusual shape discs (heart, flower, etc.) into the loading slot.

Playing a disc

- While fast-forwarding or reversing on an MP3 or WMA disc, you can only hear intermittent sounds.

Playing a CD-R or CD-RW

- Use only “finalized” CD-Rs or CD-RWs.
- This unit can play back only the files of the same type which is first detected if a disc includes both audio CD (CD-DA) files and MP3/WMA files.
- This unit can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- Some CD-Rs or CD-RWs may not play back on this unit because of their disc characteristics, and for the following causes:
 - Discs are dirty or scratched.
 - Moisture condensation occurs on the lens inside the unit.
 - The pickup lens inside the unit is dirty.
 - CD-R/CD-RW on which the files are written with “Packet Write” method.
 - There are improper recording conditions (missing data, etc.) or media conditions (stain, scratch, warp, etc.).
- CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.

- Do not use the following CD-Rs or CD-RWs:
 - Discs with stickers, labels, or protective seal stuck to the surface.
 - Discs on which labels can be directly printed by an ink jet printer.

Using these discs under high temperatures or high humidities may cause malfunctions or damages to the unit.

Playing an MP3/WMA disc

- This unit can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).
- This unit can show the names of albums, artists (performer), and ID3 Tag (Version 1.0, 1.1, 2.2, 2.3, or 2.4) for MP3 files and for WMA files.
- This unit can display only one-byte characters. No other characters can be correctly displayed.
- This unit can play back MP3/WMA files meeting the conditions below:
 - Bit rate: 8 kbps — 320 kbps
 - Sampling frequency:
 - 48 kHz, 44.1 kHz, 32 kHz (for MPEG-1)
 - 24 kHz, 22.05 kHz, 16 kHz (for MPEG-2)
 - Disc format: ISO 9660 Level 1/ Level 2, Romeo, Joliet, Windows long file name
- The maximum number of characters for file/folder names vary among the disc format used (includes 4 extension characters—<.mp3> or <.wma>).
 - ISO 9660 Level 1: up to 12 characters
 - ISO 9660 Level 2: up to 31 characters
 - Romeo*: up to 128 (72) characters
 - Joliet*: up to 64 (36) characters
 - Windows long file name*: up to 128 (72) characters

* *The parenthetic figure is the maximum number of characters for file/folder names in case the total number of files and folders is 313 or more.*

- This unit can play back the files recorded in VBR (variable bit rate).
The files recorded in VBR have a discrepancy in elapsed time display, and do not show the actual elapsed time. Especially, after performing the search function, this difference becomes noticeable.

- This unit can recognize the total of 512 files, of 200 folders, and of 8 hierarchies.
- This unit cannot play back the following files:
 - MP3 files encoded with MP3i and MP3 PRO format.
 - MP3 files encoded in an unappropriated format.
 - MP3 files encoded with Layer 1/2.
 - WMA files encoded with lossless, professional, and voice format.
 - WMA files which are not based upon Windows Media® Audio.
 - WMA files copy-protected with DRM.
 - Files which have the data such as WAVE, ATRAC3, etc.
- The search function works but search speed is not constant.

Changing the source

- If you change the source, playback also stops (without ejecting the disc).
Next time you select “CD” for the playback source, disc play starts from where it has been stopped previously.

Ejecting a disc

- If the ejected disc is not removed within 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust. (Disc will not play this time.)

General settings—PSM

- If you change the “AMP GAIN” setting from “HIGH PWR” to “LOW PWR” while the volume level is set higher than “VOL 30,” the unit automatically changes the volume level to “VOL 30.”

Other main functions

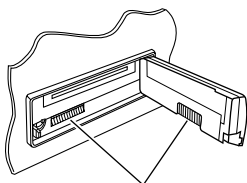
- If you try to assign a title to a 31st disc or to the 31st station frequency, “NAMEFULL” flashes on the display. Delete unwanted titles before assignment.
- Titles assigned to discs in the CD changer can also be shown if you playback the disc from the unit.

Maintenance

How to clean the connectors

Frequent detachment will deteriorate the connectors.

To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.



Connector

Moisture condensation

Moisture may condense on the lens inside the CD player in the following cases:

- After starting the heater in the car.
- If it becomes very humid inside the car.

Should this occur, the CD player may malfunction. In this case, eject the disc and leave the unit turned on for a few hours until the moisture evaporates.

How to handle discs

When removing a disc from its case, press down the center holder of the case and lift the disc out, holding it by the edges.

- Always hold the disc by the edges. Do not touch its recording surface.

When storing a disc into its case, gently insert the disc around the center holder (with the printed surface facing up).

- Make sure to store discs into the cases after use.

Center holder



To keep discs clean

A dirty disc may not play correctly. If a disc does become dirty, wipe it with a soft cloth in a straight line from center to edge.

- Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzene, etc.) to clean discs.



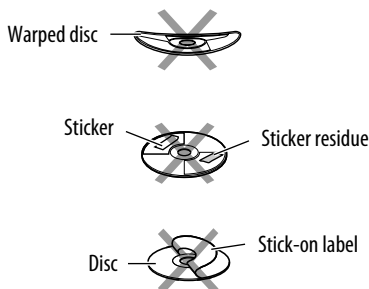
To play new discs

New discs may have some rough spots around the inner and outer edges. If such a disc is used, this unit may reject the disc.

To remove these rough spots, rub the edges with a pencil or ball-point pen, etc.



Do not use the following discs:



Troubleshooting

What appears to be trouble is not always serious. Check the following points before calling a service center.

	Symptoms	Remedies/Causes
General	• Sound cannot be heard from the speakers.	• Adjust the volume to the optimum level. • Check the cords and connections.
	• The unit does not work at all.	Reset the unit (see page 2).
FM/AM	• SSM automatic presetting does not work.	Store stations manually.
	• Static noise while listening to the radio.	Connect the antenna firmly.
Disc playback	• Disc cannot be played back.	Insert the disc correctly.
	• CD-R/CD-RW cannot be played back. • Tracks on the CD-R/CD-RW cannot be skipped.	• Insert a finalized CD-R/CD-RW. • Finalize the CD-R/CD-RW with the component which you used for recording.
	• Disc can be neither played back nor ejected.	• Unlock the disc (see page 10). • Eject the disc forcibly (see page 2).
	• Disc sound is sometimes interrupted.	• Stop playback while driving on rough roads. • Change the disc. • Check the cords and connections.
MP3/WMA playback	• Disc cannot be played back.	• Use a disc with MP3/WMA tracks recorded in the format compliant with ISO 9660 Level 1, Level 2, Romeo, or Joliet. • Add the extension code <.mp3> or <.wma> to the file names.
	• Noise is generated.	Skip to another track or change the disc. (Do not add the extension code <.mp3> or <.wma> to non-MP3 or WMA tracks.)

To be continued...

	Symptoms	Remedies/Causes
MP3/WMA playback	• A longer readout time is required (“CHECK” keeps flashing on the display).	Do not use too many hierarchies and folders.
	• Tracks do not play back in the order you have intended them to play.	Playback order is determined when the files are recorded.
	• Elapsed playing time is not correct.	This sometimes occurs during play. This is caused by how the tracks are recorded on the disc.
	• “NO FILES” appears on the display.	Insert a disc that contains MP3/WMA tracks.
	• Correct characters are not displayed (e.g. album name).	This unit can only display alphabets (upper case), numbers, and a limited number of symbols.
CD changer	• “NO DISC” appears on the display.	Insert a disc into the magazine.
	• “NO MAG” appears on the display.	Insert the magazine.
	• “RESET 8” appears on the display.	Connect this unit and the CD changer correctly and press the reset button of the CD changer.
	• “RESET 1” – “RESET 7” appears on the display.	Press the reset button of the CD changer.
	• The CD changer does not work at all.	Reset the unit (see page 2).

- Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Specifications

AUDIO AMPLIFIER SECTION

Maximum Power Output:

Front: 50 W per channel

Rear: 50 W per channel

Continuous Power Output (RMS):

Front: 19 W per channel into 4 Ω , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.

Rear: 19 W per channel into 4 Ω , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.

Load Impedance: 4 Ω (4 Ω to 8 Ω allowance)

Tone Control Range:

Bass: ± 10 dB at 100 Hz

Treble: ± 10 dB at 10 kHz

Frequency Response: 40 Hz to 20 000 Hz

Signal-to-Noise Ratio: 70 dB

Line-Out Level/Impedance:

2.5 V/20 k Ω load (full scale)

Output Impedance: 1 k Ω

Other Terminals:

CD changer, AUX (auxiliary) input jack

TUNER SECTION

Frequency Range:

FM: 87.5 MHz to 108.0 MHz

AM: 531 kHz to 1 602 kHz

[FM Tuner]

Usable Sensitivity: 11.3 dBf (1.0 μ V/75 Ω)

50 dB Quieting Sensitivity:

16.3 dBf (1.8 μ V/75 Ω)

Alternate Channel Selectivity (400 kHz): 65 dB

Frequency Response: 40 Hz to 15 000 Hz

Stereo Separation: 35 dB

Capture Ratio: 1.5 dB

[AM Tuner]

Sensitivity: 20 μ V

Selectivity: 35 dB

CD PLAYER SECTION

Type: Compact disc player

Signal Detection System: Non-contact optical pickup (semiconductor laser)

Number of Channels: 2 channels (stereo)

Frequency Response: 5 Hz to 20 000 Hz

Dynamic Range: 96 dB

Signal-to-Noise Ratio: 98 dB

Wow and Flutter: Less than measurable limit

MP3 Decoding Format:

MPEG1/2 Audio Layer 3

Max. Bit Rate: 320 kbps

WMA (Windows Media® Audio) Decoding

Format:

Max. Bit Rate: 192 kbps

GENERAL

Power Requirement:

Operating Voltage:

DC 14.4 V (11 V to 16 V allowance)

Grounding System: Negative ground

Allowable Operating Temperature:

0°C to +40°C

Dimensions (W $\times$ H $\times$ D):

Installation Size (approx.):

182 mm $\times$ 52 mm $\times$ 150 mm

Panel Size (approx.):

188 mm $\times$ 58 mm $\times$ 11 mm

Mass (approx.):

1.5 kg (excluding accessories)

Design and specifications are subject to change without notice.



Having TROUBLE with operation?
Please reset your unit
Refer to page of How to reset your unit

JVC



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0905DTSMdTJEIN

JVC KD-G524

Installation/Connection Manual

GET0338-002A
[UI]

This unit is designed to operate on **12 V DC, NEGATIVE ground electrical systems**. If your vehicle does not have this system, a voltage inverter is required, which can be purchased at JVC car audio dealers.

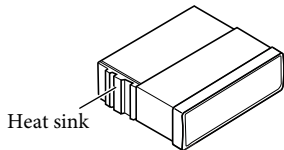
WARNINGS

To prevent short circuits, we recommend that you disconnect the battery's negative terminal and make all electrical connections before installing the unit.

- **Be sure to ground this unit to the car's chassis again after installation.**

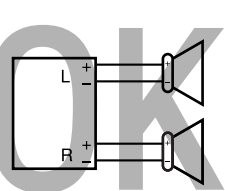
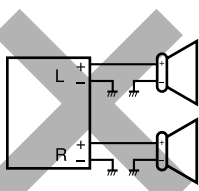
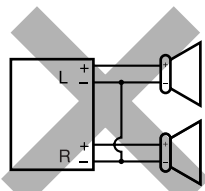
Notes:

- Replace the fuse with one of the specified rating. If the fuse blows frequently, consult your JVC car audio dealers.
- It is recommended to connect to the speakers with maximum power of more than 50 W (both at the rear and at the front, with an impedance of **4 Ω to 8 Ω**). If the maximum power is less than 50 W, change "AMP GAIN" setting to prevent the speakers from being damaged (see page 13 of the INSTRUCTIONS).
- To prevent short-circuit, cover the terminals of the UNUSED leads with insulating tape.
- The heat sink becomes very hot after use. Be careful not to touch it when removing this unit.



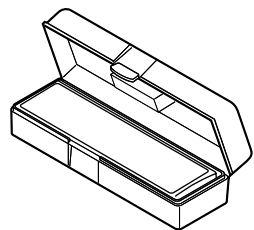
PRECAUTIONS on power supply and speaker connections:

- **DO NOT connect the speaker leads of the power cord to the car battery; otherwise, the unit will be seriously damaged.**
- BEFORE connecting the speaker leads of the power cord to the speakers, check the speaker wiring in your car.

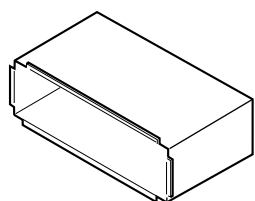


Parts list for installation and connection

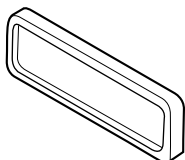
The following parts are provided for this unit. After checking them, please set them correctly.



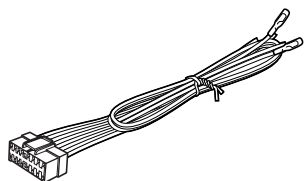
(A) / (B)
Hard case/Control panel



(C)
Sleeve



(D)
Trim plate



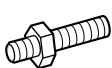
(E)
Power cord



(F)
Washer ($\phi 5$)



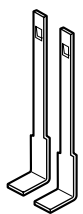
(G)
Lock nut (M5)



(H)
Mounting bolt (M5 x 20 mm)



(I)
Rubber cushion



(J)
Handles



RM-RK50
(K)
Remote controller



CR2025
(L)
Battery

TROUBLESHOOTING

• The fuse blows.

- * Are the red and black leads connected correctly?

• Power cannot be turned on.

- * Is the yellow lead connected?

• No sound from the speakers.

- * Is the speaker output lead short-circuited?

• Sound is distorted.

- * Is the speaker output lead grounded?
- * Are the "-" terminals of L and R speakers grounded in common?

• Noise interfere with sounds.

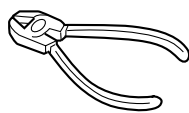
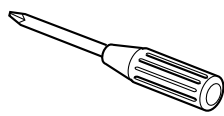
- * Is the rear ground terminal connected to the car's chassis using shorter and thicker cords?

• This unit becomes hot.

- * Is the speaker output lead grounded?
- * Are the "-" terminals of L and R speakers grounded in common?

• This unit does not work at all.

- * Have you reset your unit?



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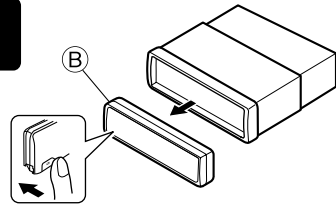
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INSTALLATION (IN-DASH MOUNTING)

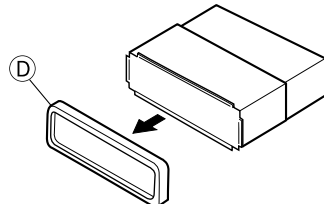
The following illustration shows a typical installation. If you have any questions or require information regarding installation kits, consult your JVC car audio dealers or a company supplying kits.

- If you are not sure how to install this unit correctly, have it installed by a qualified technician.

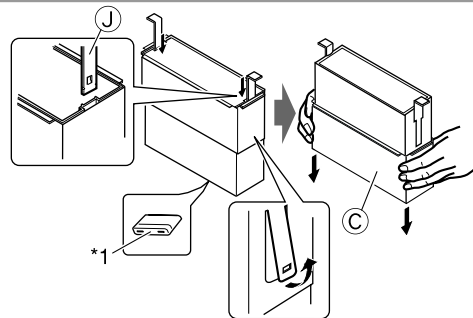
1



2

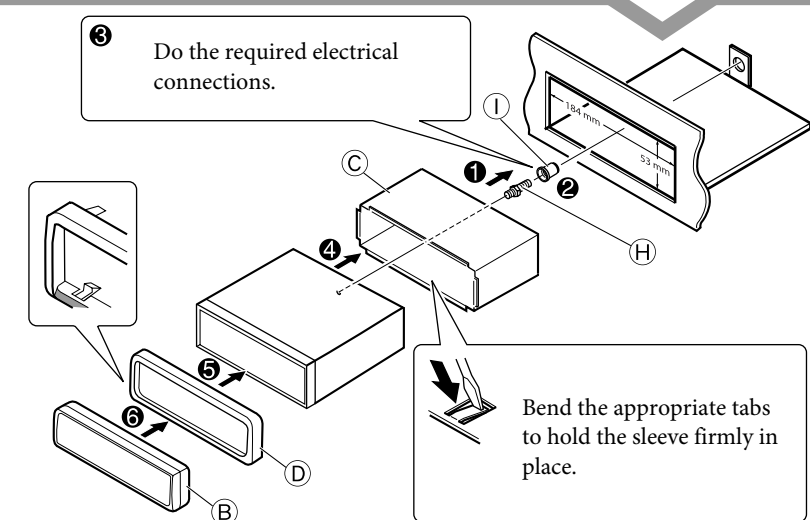


3



*1 When you stand the unit, be careful not to damage the fuse on the rear.

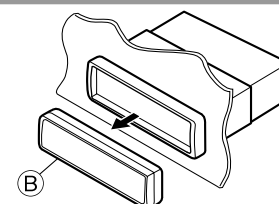
4



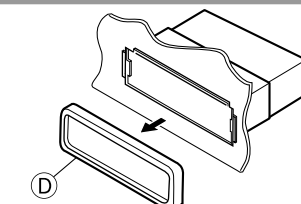
Removing the unit

Before removing the unit, release the rear section.

1

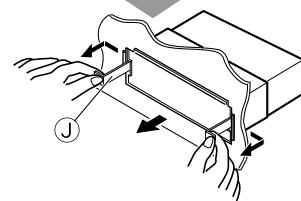


2

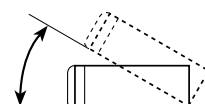
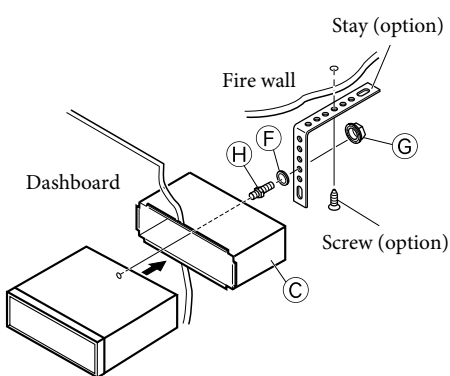


3

Insert the two handles, then pull them as illustrated so that the unit can be removed.



When using the optional stay

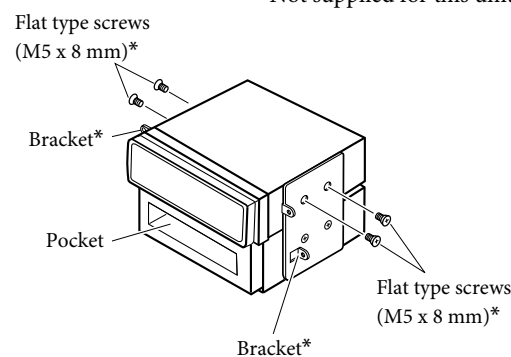


Install the unit at an angle of less than 30°.

When installing the unit without using the sleeve

In a Toyota for example, first remove the car radio and install the unit in its place.

* Not supplied for this unit.



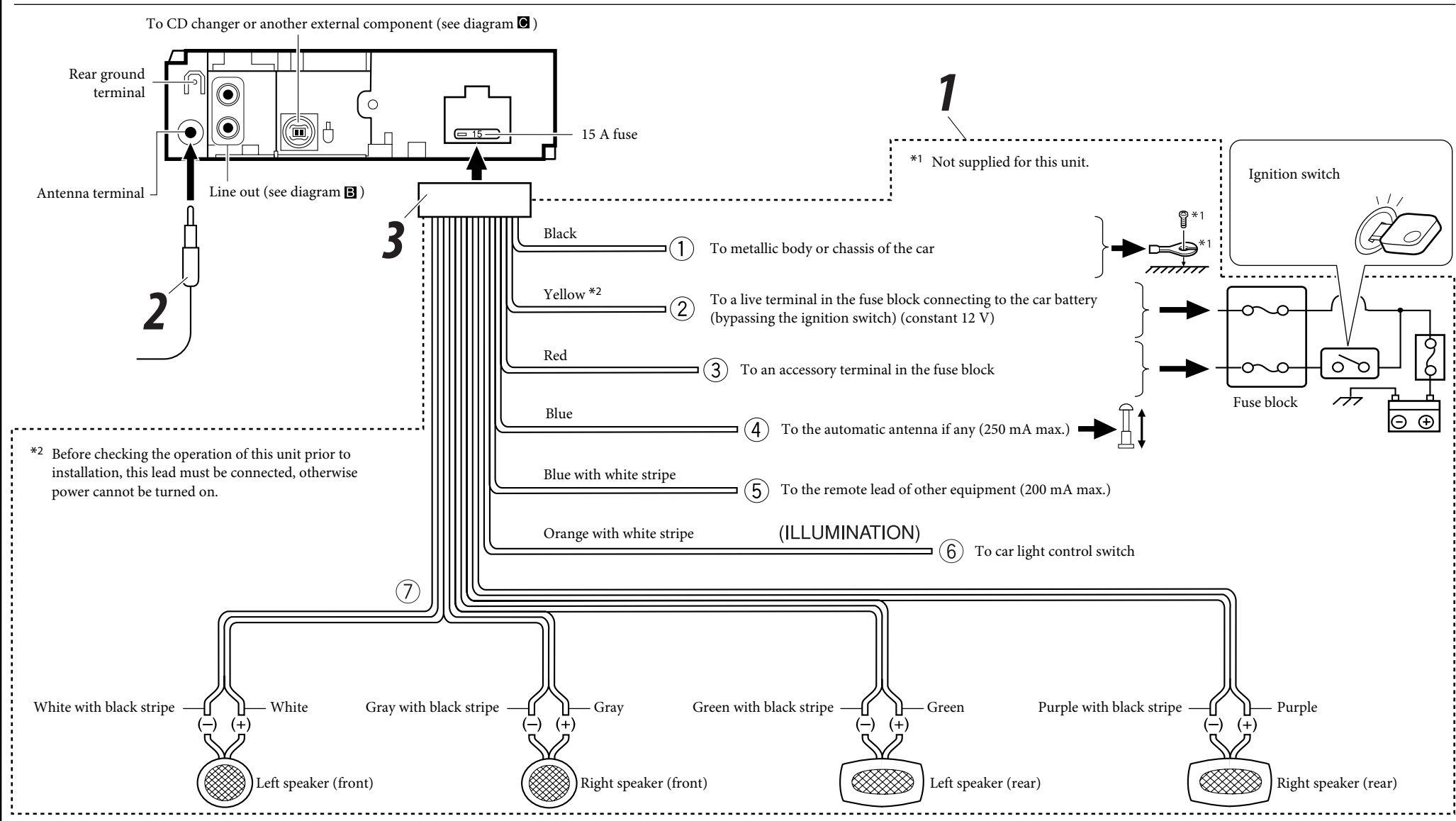
Note : When installing the unit on the mounting bracket, make sure to use the 8 mm-long screws. If longer screws are used, they could damage the unit.

ELECTRICAL CONNECTIONS

A Typical Connections

Before connecting: Check the wiring in the vehicle carefully. Incorrect connection may cause serious damage to this unit. The leads of the power cord and those of the connector from the car body may be different in color.

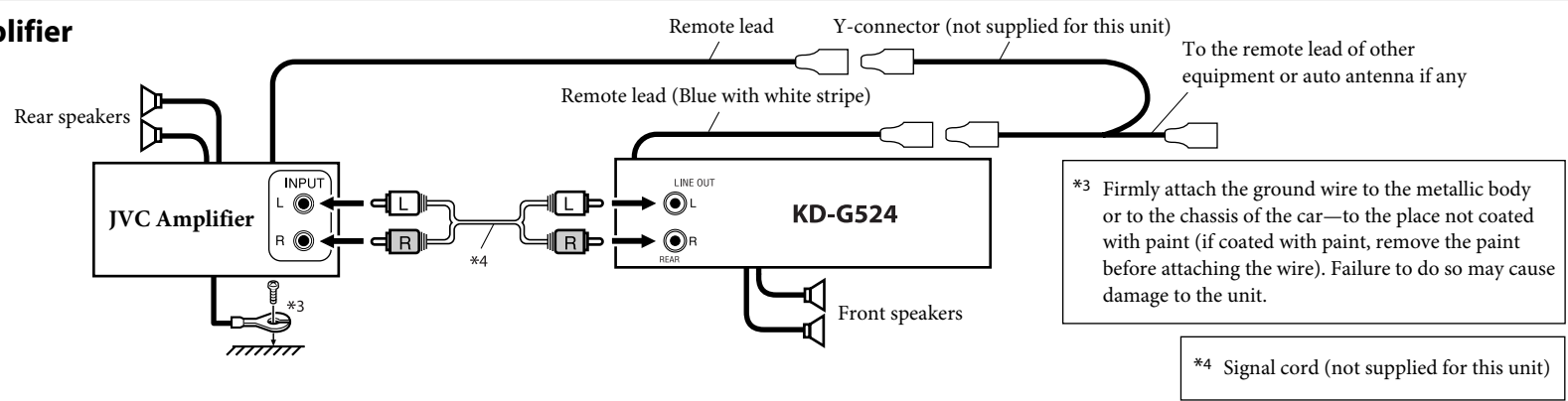
- 1 Connect the colored leads of the power cord in the order specified in the illustration below.
- 2 Connect the antenna cord.
- 3 Finally connect the wiring harness to the unit.



B Connecting the external amplifier

You can connect amplifiers to upgrade your car stereo system.

- Connect the remote lead (blue with white stripe) to the remote lead of the other equipment so that it can be controlled through this unit.
- Disconnect the speakers from this unit, connect them to the amplifier. Leave the speaker leads of this unit unused.**

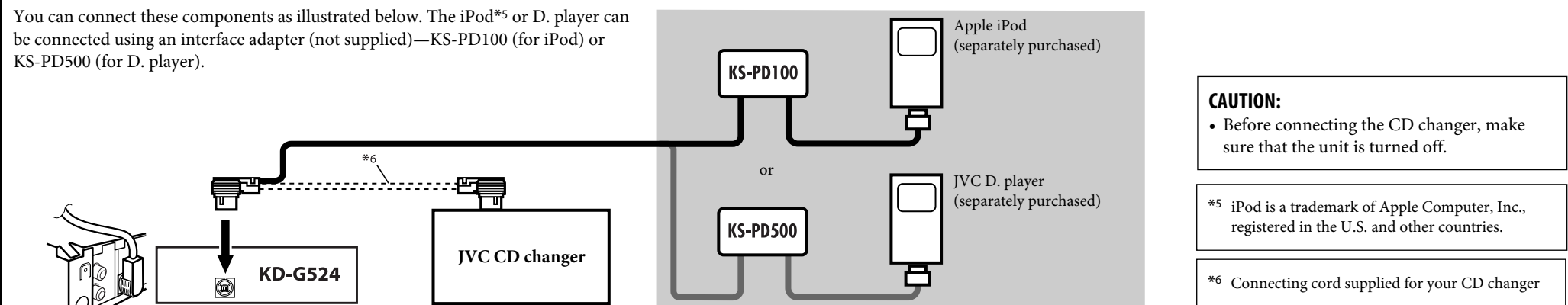


C Connecting the external components

- Set "CHANGER" for the external input setting (see page 13 of the INSTRUCTIONS.)

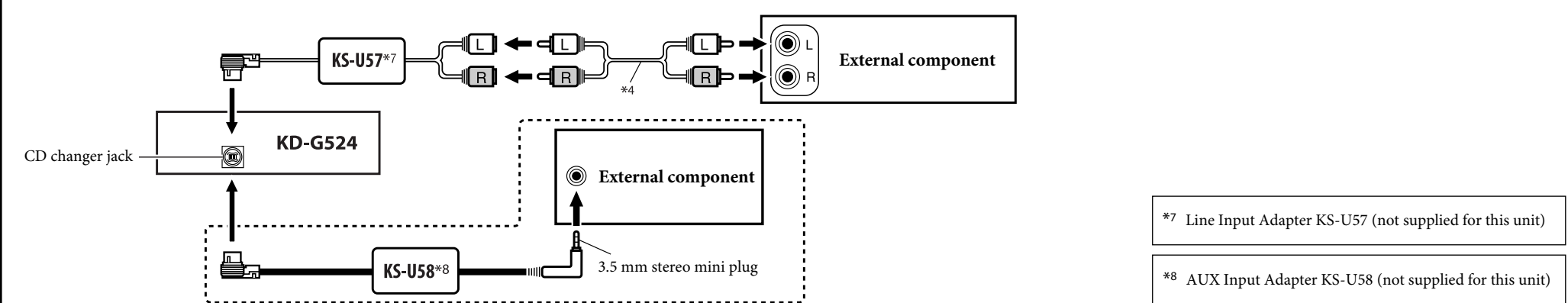
CD changer, Apple iPod®, or JVC D. player

You can connect these components as illustrated below. The iPod*5 or D. player can be connected using an interface adapter (not supplied)—KS-PD100 (for iPod) or KS-PD500 (for D. player).



- Set "EXT IN" for the external input setting (see page 13 of the INSTRUCTIONS.)

External Component



JVC



CD RECEIVER

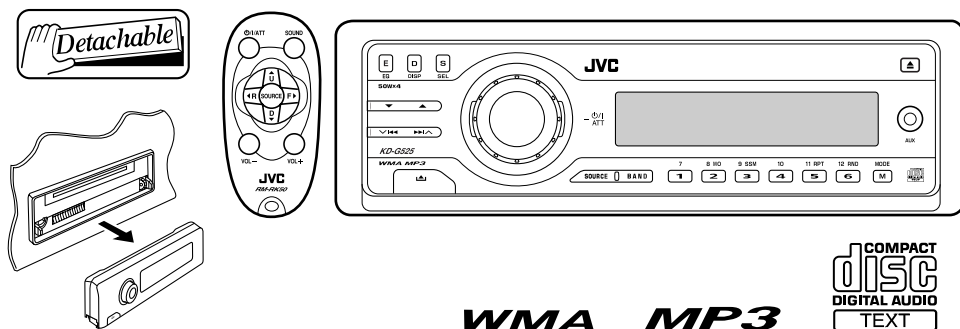
KD-G525

ENGLISH

ไทย

เครื่องเล่น CD

KD-G525



For canceling the display demonstration, see page 6.

ดูที่หน้า 6 เพื่อยกเลิกการสาธิตภาพประกอบ

For installation and connections, refer to the separate manual.

กรุณาดูคู่มือที่แยกต่างหาก ในการติดตั้งและการเชื่อมต่อ

INSTRUCTIONS

คำแนะนำ

GET0337-001A
[U/UH]

Thank you for purchasing a JVC product.

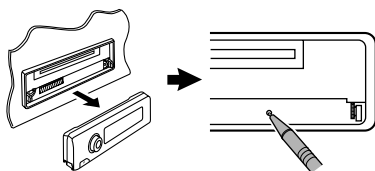
Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

IMPORTANT FOR LASER PRODUCTS

1. CLASS 1 LASER PRODUCT
2. **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
3. **CAUTION:** Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED OUTSIDE THE UNIT.

CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM.	ADVARSEL: Synlig og usynlig laserstråling når maskinen er åpen eller interlocken feiler. Undgå direkte eksponering til stråling.	VARNING: Synlig og usynlig laserstråling når den åpnes og spærren er turkoppad. Betrakt ikke strålen.	VARO: Avtattessa ja suojalukitus ohjettuna tai viallisena olet alittuna näkyvälle ja näkymättömälle lasersträilylle. Vältä säteen kohdistumista suoraan itseesi, (f)
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How to reset your unit

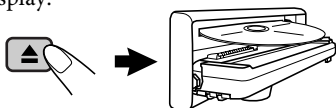


Your preset adjustments will also be erased.

How to forcibly eject a disc

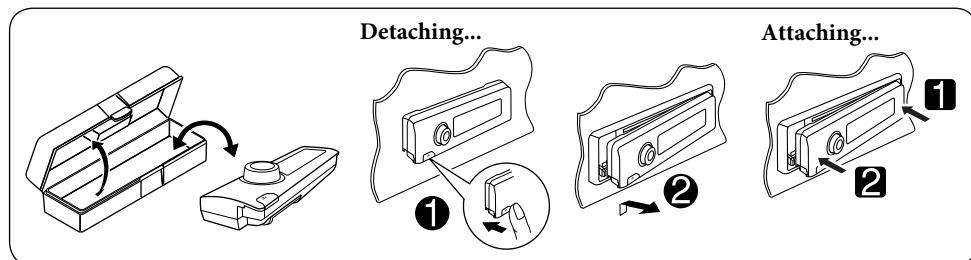


"PLEASE" and "EJECT" appear alternately on the display.



- If this does not work, reset your unit.
- Be careful not to drop the disc when it ejects.

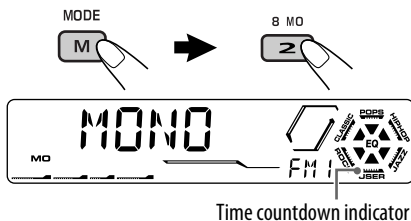
How to detach/attach the control panel



How to use the M MODE button

If you press M MODE, the unit goes into functions mode, then the number buttons and ▲/▼ buttons work as different function buttons.

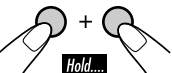
Ex.: When number button 2 works as MO (monaural) button.



To use these buttons for their original functions again after pressing M MODE, wait for 5 seconds without pressing any of these buttons until the functions mode is cleared or press M MODE again.

How to read this manual

- Button operations are mainly explained with the illustrations in the table below.
- Some related tips and notes are explained in “More about this unit” (see pages 16 and 17).

	Press briefly.	
	Press repeatedly.	
	Press either one.	
	Press and hold until your desired response begins.	
	Press and hold both buttons at the same time.	

The following marks are used to indicate...



: Built-in CD player operations.



: External CD changer operations.



: Indicator displayed for the corresponding operation.

Warning:

If you need to operate the unit while driving, be sure to look ahead carefully or you may be involved in a traffic accident.

Caution on volume setting:

Discs produce very little noise compared with other sources. Lower the volume before playing a disc to avoid damaging the speakers by the sudden increase of the output level.

CONTENTS

Control panel	4
Remote controller — RM-RK50	5
Getting started	6
Basic operations	6
Radio operations	7
Disc operations	8
Playing a disc in the unit	8
Playing discs in the CD changer	8
Sound adjustments	11
General settings — PSM	12
Title assignment	14
External component operations	15
More about this unit	16
Maintenance	18
Troubleshooting	19
Specifications	21

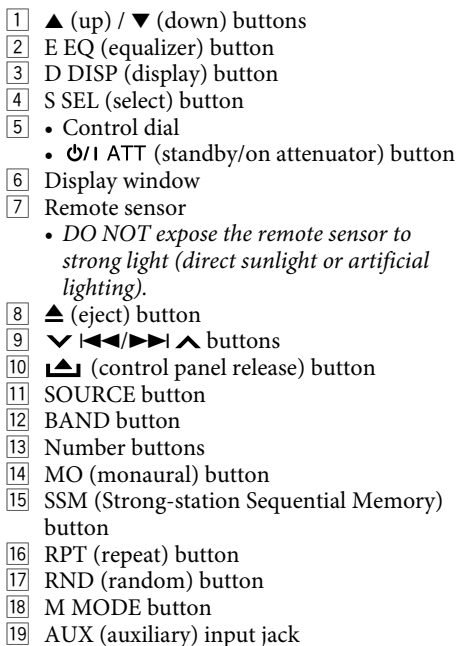
For safety...

- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operations.

Temperature inside the car...

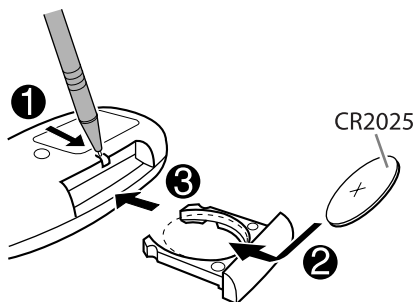
If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.

Display window



- 20 Main display
- 21 Disc information indicators—TAG (ID3 Tag), (folder), (track/file)
- 22 EQ (equalizer) indicator
- 23 Sound mode (C-EQ: custom equalizer) indicators—ROCK, CLASSIC, POPS, HIP HOP, JAZZ, USER
 - also works as the time countdown indicator and level meter during play (see page 13).
- 24 Tuner reception indicators—ST (stereo), MO (monaural)
- 25 Disc type indicators—WMA, MP3
- 26 Playback source indicators—CH: *Lights up only when CD-CH is selected as the playback source.*
DISC: *Lights up for the built-in CD player.*
- 27 Playback mode / item indicators—RND (random), (disc), (folder), RPT (repeat)
- 28 LOUD (loudness) indicator
- 29 Source display / Volume level indicator
- 30 Tr (track) indicator

Installing the lithium coin battery (CR2025)

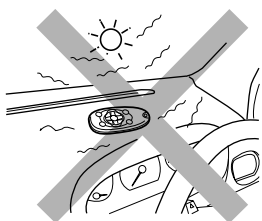


Aim the remote controller directly at the remote sensor on the unit. Make sure there is no obstacle in between.

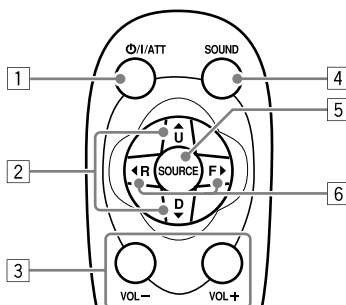
Warning:

- Do not install any battery other than CR2025 or its equivalent; otherwise, it may explode.
- Store the battery in a place where children cannot reach to avoid risk of accident.
- To prevent the battery from over-heating, cracking, or starting a fire:
 - Do not recharge, short, disassemble, heat the battery, or dispose of it in a fire.
 - Do not leave the battery with other metallic materials.
 - Do not poke the battery with tweezers or similar tools.
 - Wrap the battery with tape and insulate when throwing away or saving it.

Caution:



Main elements and features

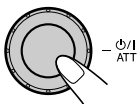


- 1** Φ /I/ATT (standby/on/attenuator) button
 - Turns the power on if pressed briefly or attenuates the sound when power is on.
 - Turns the power off if pressed and held.
- 2** $\blacktriangle$ U (up) / D (down) $\blacktriangledown$ buttons
 - Changes the FM/AM bands with $\blacktriangle$ U only.
 - Changes the preset stations with D $\blacktriangledown$ only.
 - Changes the folder of the MP3/WMA discs.
 - While playing an MP3 disc on an MP3-compatible CD changer:
 - Changes the disc if pressed briefly.
 - Changes the folder if pressed and held.
- 3** VOL - / VOL + buttons
 - Adjusts the volume level.
- 4** SOUND button
 - Selects the sound mode (C-EQ: custom equalizer).
- 5** SOURCE button
 - Selects the source.
- 6** $\blacktriangleleft$ R (reverse) / F (forward) $\blacktriangleright$ buttons
 - Searches for stations if pressed briefly.
 - Fast-forwards or reverses the track if pressed and held.
 - Changes the tracks of the disc if pressed briefly.

Getting started

Basic operations

- 1 Turn on the power.



- 2



- Select “CD-CH” when using an Apple iPod® or a JVC D. player (see page 15).

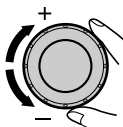
iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.

* You cannot select these sources if they are not ready.

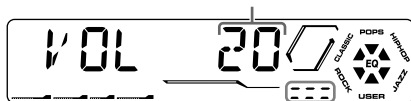
- 3 For FM/AM tuner



- 4 Adjust the volume.



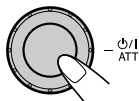
Volume level appears.



Volume level indicator

- 5 Adjust the sound as you want. (See pages 11 and 12.)

To drop the volume in a moment (ATT)



To restore the sound, press it again.

To turn off the power



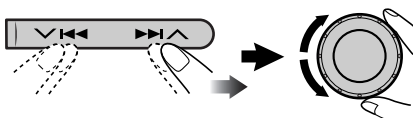
Basic settings

- See also “General settings — PSM” on pages 12 and 13.

- 1



- 2



- 1 Canceling the display demonstrations

Select “DEMO,” then “DEMO OFF.”

- 2 Setting the clock

Select “CLOCK H” (hour), then adjust the hour.

Select “CLOCK M” (minute), then adjust the minute.

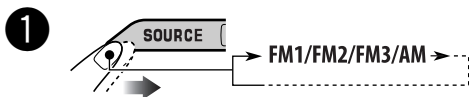
- 3 Finish the procedure.



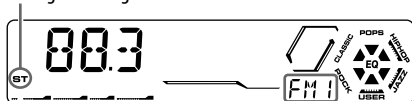
To check the current clock time when the power is turned off



Radio operations

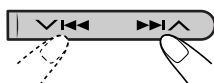


Lights up when receiving an FM stereo broadcast with sufficient signal strength.



Selected band appears.

3 Start searching for a station.

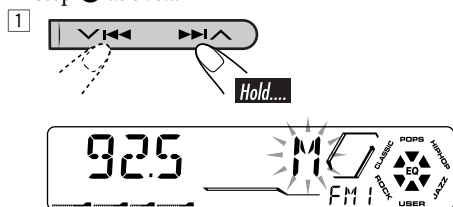


When a station is received, searching stops.

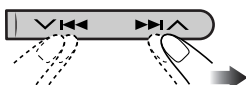
To stop searching, press the same button again.

To tune in to a station manually

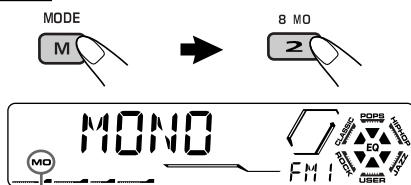
In step 3 above...



2 Select the desired station frequencies.



When an FM stereo broadcast is hard to receive



Lights up when monaural mode is activated.

Reception improves, but stereo effect will be lost.

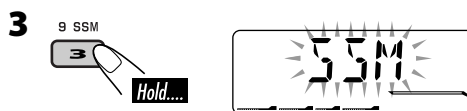
To restore the stereo effect, repeat the same procedure. "MONO OFF" appears and the MO indicator goes off.

Storing stations in memory

You can preset six stations for each band.

FM station automatic presetting—SSM (Strong-station Sequential Memory)

1 Select the FM band (FM1 – FM3) you want to store into.

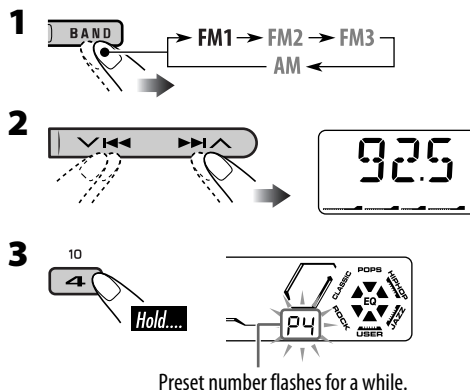


"SSM" flashes, then disappears when automatic presetting is over.

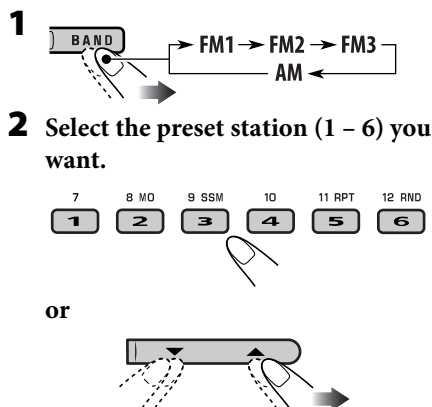
Local FM stations with the strongest signals are searched and stored automatically in the FM band.

Manual presetting

Ex.: Storing FM station of 92.5 MHz into preset number 4 of the FM1 band.



Listening to a preset station



To check the other information while listening to an FM or AM station

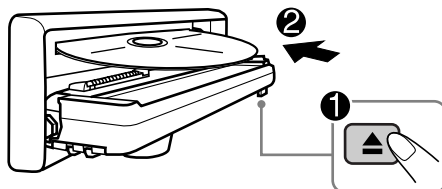


Clock → Station name* → Frequency →
(back to the beginning)

* If no title is assigned to a station, "NO NAME" appears. To assign a title to a station, see page 14.

Disc operations

Playing a disc in the unit



All tracks will be played repeatedly until you change the source or eject the disc.

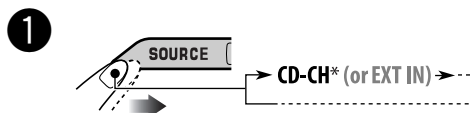
To stop play and eject the disc



Playing discs in the CD changer

All discs in the magazine will be played repeatedly until you change the source.

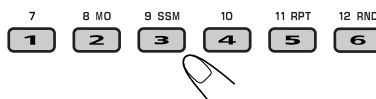
- Ejecting the magazine will also stop playing.



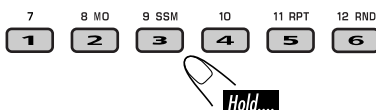
* If you have changed "EXT IN" setting to "EXT IN" (see page 13), you cannot select the CD changer.
See also page 15 when using an iPod or JVC D. player.

2 Select a disc.

For disc number from 01 - 06:



For disc number from 07 - 12:



About MP3 and WMA discs

MP3 and WMA “tracks” (words “file” and “track” are used interchangeably) are recorded in “folders.”

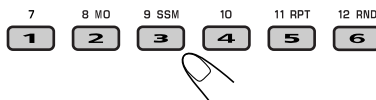
About the CD changer

It is recommended to use a JVC MP3-compatible CD changer with your unit.

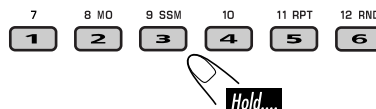
- You can also connect other CH-X series CD changers (except CH-X99 and CH-X100). These units are not compatible with MP3 discs.
- You cannot play any WMA disc in the CD changer.
- You cannot use the KD-MK series CD changers with this unit.
- Disc text information recorded in the CD Text can be displayed when a JVC CD Text compatible CD changer is connected.

To locate a particular track (for CD) or folder (for MP3 or WMA discs) directly

To select a number from 01 – 06:



To select a number from 07 – 12:

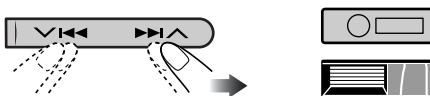


- To use folder search on MP3/WMA discs, it is required that folders are assigned with 2-digit numbers at the beginning of their folder names—01, 02, 03, and so on.

To fast-forward or reverse the track



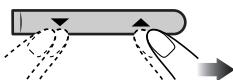
To go to the next or previous tracks



To go to the next or previous folders (only for MP3 or WMA discs)

For MP3 discs:

For WMA discs:



Other main functions

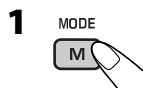
■ Skipping a track quickly during play



**Only possible on JVC
MP3-compatible CD changer**

- For MP3 or WMA disc, you can skip a track within the same folder.

Ex.: To select track 32 while playing track 6



Each time you press the button, you can skip 10 tracks.

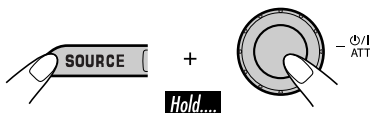
- After the last track, the first track will be selected and vice versa.



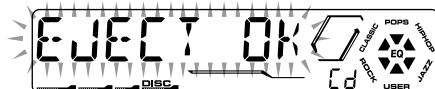
■ Prohibiting disc ejection



You can lock a disc in the loading slot.



To cancel the prohibition, repeat the same procedure.



Changing the display information

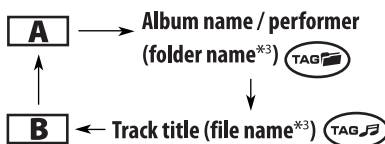


■ While playing an audio CD or a CD Text

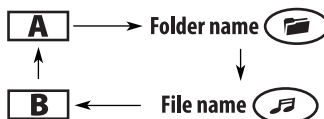


■ While playing an MP3 or WMA*2 disc

- When "TAG DISP" is set to "TAG ON"
(see page 13)



- When "TAG DISP" is set to "TAG OFF"



- A** : Clock with the current track number
- B** : Elapsed playing time with the current track number

*1 If the current disc is an audio CD, "NO NAME" appears.

*2 Only for the built-in CD player.

*3 If an MP3/WMA file does not have ID3 tags, folder name and file name appear. In this case, the TAG indicator will not light up.

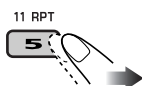
Selecting the playback modes

You can use only one of the following playback modes at a time.



2 Select your desired playback mode.

Repeat play



Mode	Plays repeatedly
TRK RPT	: The current track.
FLDR RPT *1	: All tracks of the current folder.
DISC RPT *2	: All tracks of the current disc.
RPT OFF	: Cancels.

Random play



Mode	Plays at random
FLDR RND *1	: All tracks of the current folder, then tracks of the next folder and so on.
DISC RND	: All tracks of the current disc.
MAG RND *2	: All tracks of the inserted discs.
RND OFF	: Cancels.

*1 Only while playing an MP3 or WMA disc.

*2 Only while playing discs in the CD changer.

Sound adjustments

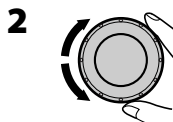
You can select a preset sound mode suitable to the music genre (C-EQ: custom equalizer).



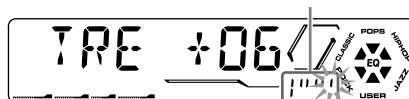
Preset values	BAS (bass)	TRE (treble)	LOUD (loudness)
USER (Flat sound)	00	00	OFF
ROCK (Rock or disco music)	+03	+01	ON
CLASSIC (Classical music)	+01	-02	OFF
POPS (Light music)	+04	+01	OFF
HIP HOP (Funk or rap music)	+02	00	ON
JAZZ (Jazz music)	+02	+03	OFF

Adjusting the sound

You can adjust the sound characteristics to your preference.



Indication pattern changes as you adjust the level.



Ex.: When "TRE" is selected

To be continued...

Indication [Range]

BAS*1 (bass)

Adjust the bass. [-06 to +06]

TRE*1 (treble)

Adjust the treble. [-06 to +06]

FAD*2 (fader)

Adjust the front and rear speaker balance.
[R06 to F06]

BAL (balance)

Adjust the left and right speaker balance.
[L06 to R06]

LOUD*1 (loudness)

Boost low and high frequencies to produce a well-balanced sound at low volume level.
[LOUD ON or LOUD OFF]

VOL (volume)

Adjust the volume. [00 to 30 or 50*3]

*1 When you adjust the bass, treble, or loudness, the adjustment you have made is stored for the currently selected sound mode (C-EQ) including "USER."

*2 If you are using a two-speaker system, set the fader level to "00."

*3 Depending on the amplifier gain control setting. (See page 13 for details.)

General settings — PSM

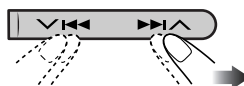
You can change PSM (Preferred Setting Mode) items listed in the table that follows.

1



2

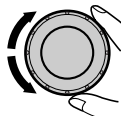
Select a PSM item.



Ex.: When you select "DIMMER"

3

Adjust the PSM item selected.



4

Repeat steps 2 and 3 to adjust the other PSM items if necessary.

5

Finish the procedure.



Indications	Selectable settings, [reference page]
DEMO Display demonstration	DEMO ON : [Initial]; Display demonstration will be activated automatically if no operation is done for about 20 seconds, [6]. DEMO OFF : Cancels.
CLOCK H Hour adjustment	1 – 12, [6] [Initial: 1 (1:00)]
CLOCK M Minute adjustment	00 – 59, [6] [Initial: 00 (1:00)]
LEVEL Audio level meter	ON : [Initial]; Activates the audio level indicator. OFF : Cancels; sound mode indicator is shown.
DIMMER Dimmer	AUTO : [Initial]; Dims the display when you turn on the headlights. ON : Activates dimmer. OFF : Cancels.
SCROLL *1 Scroll	ONCE : [Initial]; Scrolls the disc information once. AUTO : Repeats scrolling (5-second intervals in between). OFF : Cancels. • Pressing D DISP for more than one second can scroll the display regardless of the setting.
EXT IN *2 External input	CHANGER : [Initial]; To use a JVC CD changer, [8], an Apple iPod or a JVC D. player, [15]. EXT IN : To use another external component, [15].
AUX ADJ Auxiliary input level adjustment	A.ADJ 00 – A.ADJ 05 : Adjust the auxiliary input level to avoid the sudden increase of the output level when changing the source from external component connected to the AUX input jack on the control panel. [Initial: A.ADJ 00]
TAG DISP Tag display	TAG ON : [Initial]; Shows the ID3 tag while playing MP3/WMA tracks, [10]. TAG OFF : Cancels.
AMP GAIN Amplifier gain control	You can change the maximum volume level of this unit. LOW PWR : VOL 00 – VOL 30 (Select this if the maximum power of the speaker is less than 50 W to prevent them from damaging the speaker.) HIGH PWR : [Initial]; VOL 00 – VOL 50

*1 Some characters or symbols will not be shown correctly (or will be blanked) on the display.

*2 Displayed only when one of the following sources is selected—FM, AM, CD, or AUX IN.

Title assignment

You can assign titles to station frequencies and CDs (both in the unit and the CD changer).

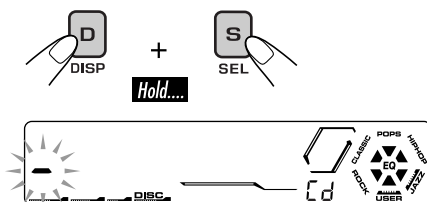
Sources	Maximum number of characters
FM/AM tuner	Up to 8 characters (up to 30 station frequencies including both FM and AM)
CDs/CD-CH	Up to 32 characters (up to 30 discs)

* You cannot assign a title to a CD Text or an MP3/WMA disc.

1 Select the sources.

- For FM/AM tuner: Tune into a station.
- For CDs in this unit: Insert a CD.
- For CDs in the CD changer: Select "CD-CH," then select a disc number.

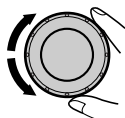
2 Enter the title assignment mode.



Ex.: When you select "CD" as the source

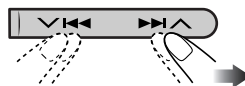
3 Assign a title.

1 Select a character.



A	B	C	D	E	F	G	H	I	J	K	L	M	N
O	P	Q	R	S	T	U	V	W	X	Y	Z	0	1
2	3	4	5	6	7	8	9	-	/	<	>	space	

2 Move to the next (or previous) character position.



3 Repeat steps 1 and 2 until you finish entering the title.

4 Finish the procedure.



To erase the entire title

In step 2 on the left...



This unit is ready for operating an Apple iPod® or a JVC D. player from the control panel.

- For details, refer also to the manual supplied with the interface adapter for iPod®—KS-PD100 or D. player—KS-PD500.

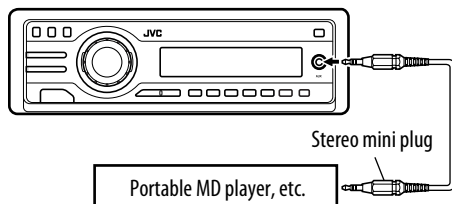
External component operations

You can connect an external component to...

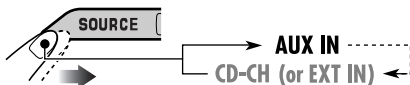
- CD changer jack on the rear using:
 - **Line Input Adapter**—KS-U57 (not supplied) or **AUX Input Adapter**—KS-U58 (not supplied) for any other components (except iPod and D. player).
 - **Interface adapter for iPod®**—KS-PD100 (not supplied) for controlling iPod.
 - **D. player interface adapter**—KS-PD500 (not supplied) for controlling D. player.
- AUX (auxiliary) input jack on the control panel.

For connection, see Installation/Connection Manual (separate volume).

Connecting an external component to the AUX input jack

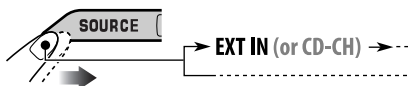


- 1 For selecting the external component connected to...
 - **AUX input jack**

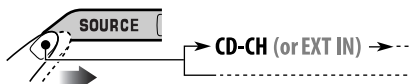


- **CD changer jack on the rear using KS-U57 or KS-U58**

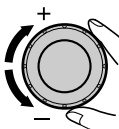
If “EXT IN” does not appear, see page 13 and select the external input (“EXT IN”).



- **CD changer jack on the rear using interface adapter for iPod—KS-PD100 or for D. player—KS-PD500**



- 2 Turn on the connected component and start playing the source.
- 3 Adjust the volume.



- 4 Adjust the sound as you want. (See pages 11 and 12.)

To check the other information while listening to an external component



Clock ↔ AUX IN, EXT IN, or CD-CH*

* See “While playing an MP3 or WMA disc” on page 10 for details.

More about this unit

Basic operations

Turning on the power

- By pressing SOURCE on the unit, you can also turn on the power. If the source is ready, playback also starts.

Turning off the power

- If you turn off the power while listening to a disc, disc play will start from where playback has been stopped previously, next time you turn on the power.

Selecting the sources

- When no disc is loaded in the unit, "CD" cannot be selected.
- "CD-CH" cannot be selected when the target component is not connected.

Tuner operations

Storing stations in memory

- During SSM search...
 - All previously stored stations are erased and stations are stored newly.
 - Received stations are preset in No. 1 (lowest frequency) to No. 6 (highest frequency).
 - When SSM is over, the station stored in No. 1 will be automatically tuned in.
- When storing a station manually, a previously preset station is erased when a new station is stored in the same preset number.

Disc operations

Caution for DualDisc playback

- The Non-DVD side of a "DualDisc" does not comply with the "Compact Disc Digital Audio" standard. Therefore, the use of Non-DVD side of a DualDisc on this product may not be recommended.

General

- This unit has been designed to reproduce CDs/CD Texts, and CD-Rs (Recordable)/CD-RWs (Rewritable) in audio CD (CD-DA), MP3 and WMA formats.
- When a disc has been loaded, selecting "CD" for the playback source starts disc play.

Inserting a disc

- When a disc is inserted upside down, "PLEASE" and "EJECT" appear alternately on the display. Press  to eject the disc.
- Do not insert 8 cm discs (single CD) and unusual shape discs (heart, flower, etc.) into the loading slot.

Playing a disc

- While fast-forwarding or reversing on an MP3 or WMA disc, you can only hear intermittent sounds.

Playing a CD-R or CD-RW

- Use only "finalized" CD-Rs or CD-RWs.
- This unit can play back only the files of the same type which is first detected if a disc includes both audio CD (CD-DA) files and MP3/WMA files.
- This unit can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- Some CD-Rs or CD-RWs may not play back on this unit because of their disc characteristics, and for the following causes:
 - Discs are dirty or scratched.
 - Moisture condensation occurs on the lens inside the unit.
 - The pickup lens inside the unit is dirty.
 - CD-R/CD-RW on which the files are written with "Packet Write" method.
 - There are improper recording conditions (missing data, etc.) or media conditions (stain, scratch, warp, etc.).
- CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.

- Do not use the following CD-Rs or CD-RWs:
 - Discs with stickers, labels, or protective seal stuck to the surface.
 - Discs on which labels can be directly printed by an ink jet printer.
 Using these discs under high temperatures or high humidities may cause malfunctions or damages to the unit.

Playing an MP3/WMA disc

- This unit can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).
 - This unit can show the names of albums, artists (performer), and ID3 Tag (Version 1.0, 1.1, 2.2, 2.3, or 2.4) for MP3 files and for WMA files.
 - This unit can display only one-byte characters. No other characters can be correctly displayed.
 - This unit can play back MP3/WMA files meeting the conditions below:
 - Bit rate: 8 kbps — 320 kbps
 - Sampling frequency:
 - 48 kHz, 44.1 kHz, 32 kHz (for MPEG-1)
 - 24 kHz, 22.05 kHz, 16 kHz (for MPEG-2)
 - Disc format: ISO 9660 Level 1/ Level 2, Romeo, Joliet, Windows long file name
 - The maximum number of characters for file/folder names vary among the disc format used (includes 4 extension characters—<.mp3> or <.wma>).
 - ISO 9660 Level 1: up to 12 characters
 - ISO 9660 Level 2: up to 31 characters
 - Romeo*: up to 128 (72) characters
 - Joliet*: up to 64 (36) characters
 - Windows long file name*: up to 128 (72) characters
- * *The parenthetic figure is the maximum number of characters for file/folder names in case the total number of files and folders is 313 or more.*
- This unit can play back the files recorded in VBR (variable bit rate).
The files recorded in VBR have a discrepancy in elapsed time display, and do not show the actual elapsed time. Especially, after performing the search function, this difference becomes noticeable.

- This unit can recognize the total of 512 files, of 200 folders, and of 8 hierarchies.
- This unit cannot play back the following files:
 - MP3 files encoded with MP3i and MP3 PRO format.
 - MP3 files encoded in an inappropriate format.
 - MP3 files encoded with Layer 1/2.
 - WMA files encoded with lossless, professional, and voice format.
 - WMA files which are not based upon Windows Media® Audio.
 - WMA files copy-protected with DRM.
 - Files which have the data such as WAVE, ATAC3, etc.
- The search function works but search speed is not constant.

Changing the source

- If you change the source, playback also stops (without ejecting the disc).
Next time you select “CD” for the playback source, disc play starts from where it has been stopped previously.

Ejecting a disc

- If the ejected disc is not removed within 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust. (Disc will not play this time.)

General settings—PSM

- If you change the “AMP GAIN” setting from “HIGH PWR” to “LOW PWR” while the volume level is set higher than “VOL 30,” the unit automatically changes the volume level to “VOL 30.”

Other main functions

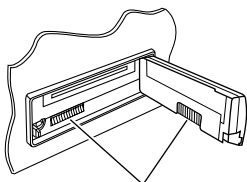
- If you try to assign a title to a 31st disc or to the 31st station frequency, “NAMEFULL” flashes on the display. Delete unwanted titles before assignment.
- Titles assigned to discs in the CD changer can also be shown if you playback the disc from the unit.

Maintenance

How to clean the connectors

Frequent detachment will deteriorate the connectors.

To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.



Connector

Moisture condensation

Moisture may condense on the lens inside the CD player in the following cases:

- After starting the heater in the car.
- If it becomes very humid inside the car.

Should this occur, the CD player may malfunction. In this case, eject the disc and leave the unit turned on for a few hours until the moisture evaporates.

How to handle discs

When removing a disc from its case, press down the center holder of the case and lift the disc out, holding it by the edges.

- Always hold the disc by the edges. Do not touch its recording surface.

When storing a disc into its case, gently insert the disc around the center holder (with the printed surface facing up).

- Make sure to store discs into the cases after use.

Center holder



To keep discs clean

A dirty disc may not play correctly. If a disc does become dirty, wipe it with a soft cloth in a straight line from center to edge.



- Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzene, etc.) to clean discs.

To play new discs

New discs may have some rough spots around the inner and outer edges. If such a disc is used, this unit may reject the disc.



To remove these rough spots, rub the edges with a pencil or ball-point pen, etc.

Do not use the following discs:



Warped disc



Sticker

Sticker residue



Disc

Stick-on label

Troubleshooting

What appears to be trouble is not always serious. Check the following points before calling a service center.

	Symptoms	Remedies/Causes
General	• Sound cannot be heard from the speakers.	• Adjust the volume to the optimum level. • Check the cords and connections.
	• The unit does not work at all.	Reset the unit (see page 2).
FM/AM	• SSM automatic presetting does not work.	Store stations manually.
	• Static noise while listening to the radio.	Connect the antenna firmly.
Disc playback	• Disc cannot be played back.	Insert the disc correctly.
	• CD-R/CD-RW cannot be played back. • Tracks on the CD-R/CD-RW cannot be skipped.	• Insert a finalized CD-R/CD-RW. • Finalize the CD-R/CD-RW with the component which you used for recording.
	• Disc can be neither played back nor ejected.	• Unlock the disc (see page 10). • Eject the disc forcibly (see page 2).
	• Disc sound is sometimes interrupted.	• Stop playback while driving on rough roads. • Change the disc. • Check the cords and connections.
MP3/WMA playback	• Disc cannot be played back.	• Use a disc with MP3/WMA tracks recorded in the format compliant with ISO 9660 Level 1, Level 2, Romeo, or Joliet. • Add the extension code <.mp3> or <.wma> to the file names.
	• Noise is generated.	Skip to another track or change the disc. (Do not add the extension code <.mp3> or <.wma> to non-MP3 or WMA tracks.)

To be continued...

	Symptoms	Remedies/Causes
MP3/WMA playback	• A longer readout time is required (“CHECK” keeps flashing on the display).	Do not use too many hierarchies and folders.
	• Tracks do not play back in the order you have intended them to play.	Playback order is determined when the files are recorded.
	• Elapsed playing time is not correct.	This sometimes occurs during play. This is caused by how the tracks are recorded on the disc.
	• “NO FILES” appears on the display.	Insert a disc that contains MP3/WMA tracks.
	• Correct characters are not displayed (e.g. album name).	This unit can only display alphabets (upper case), numbers, and a limited number of symbols.
CD changer	• “NO DISC” appears on the display.	Insert a disc into the magazine.
	• “NO MAG” appears on the display.	Insert the magazine.
	• “RESET 8” appears on the display.	Connect this unit and the CD changer correctly and press the reset button of the CD changer.
	• “RESET 1” – “RESET 7” appears on the display.	Press the reset button of the CD changer.
	• The CD changer does not work at all.	Reset the unit (see page 2).

- Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

AUDIO AMPLIFIER SECTION

Maximum Power Output:

Front: 50 W per channel

Rear: 50 W per channel

Continuous Power Output (RMS):

Front: 19 W per channel into 4 Ω , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.

Rear: 19 W per channel into 4 Ω , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.

Load Impedance: 4 Ω (4 Ω to 8 Ω allowance)

Tone Control Range:

Bass: ± 10 dB at 100 Hz

Treble: ± 10 dB at 10 kHz

Frequency Response: 40 Hz to 20 000 Hz

Signal-to-Noise Ratio: 70 dB

Line-Out Level/Impedance:

2.5 V/20 k Ω load (full scale)

Output Impedance: 1 k Ω

Other Terminals:

CD changer, AUX (auxiliary) input jack

TUNER SECTION

Frequency Range:

FM: 87.5 MHz to 108.0 MHz

AM: 531 kHz to 1 602 kHz

[FM Tuner]

Usable Sensitivity: 11.3 dBf (1.0 μ V/75 Ω)

50 dB Quieting Sensitivity:

16.3 dBf (1.8 μ V/75 Ω)

Alternate Channel Selectivity (400 kHz): 65 dB

Frequency Response: 40 Hz to 15 000 Hz

Stereo Separation: 35 dB

Capture Ratio: 1.5 dB

[AM Tuner]

Sensitivity: 20 μ V

Selectivity: 35 dB

CD PLAYER SECTION

Type: Compact disc player

Signal Detection System: Non-contact optical pickup (semiconductor laser)

Number of Channels: 2 channels (stereo)

Frequency Response: 5 Hz to 20 000 Hz

Dynamic Range: 96 dB

Signal-to-Noise Ratio: 98 dB

Wow and Flutter: Less than measurable limit

MP3 Decoding Format:

MPEG1/2 Audio Layer 3

Max. Bit Rate: 320 kbps

WMA (Windows Media® Audio) Decoding

Format:

Max. Bit Rate: 192 kbps

GENERAL

Power Requirement:

Operating Voltage:

DC 14.4 V (11 V to 16 V allowance)

Grounding System: Negative ground

Allowable Operating Temperature:

0°C to +40°C

Dimensions (W $\times$ H $\times$ D):

Installation Size (approx.):

182 mm $\times$ 52 mm $\times$ 150 mm

Panel Size (approx.):

188 mm $\times$ 58 mm $\times$ 11 mm

Mass (approx.):

1.5 kg (excluding accessories)

Design and specifications are subject to change without notice.

Having TROUBLE with operation?

Please reset your unit

Refer to page of How to reset your unit

หากมีปัญหาในการใช้งาน
กรุณากดปุ่มตั้งค่าเริ่มต้นใหม่
กรุณาดูหน้าวิธีตั้งค่าเครื่องใหม่

JVC



EN, TH

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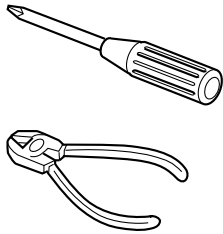
0905DTSMMDTJEIN

JVC KD-G525

Installation/Connection Manual

การติดตั้ง/คู่มือการติดตั้ง

GET0337-006A
[U/UH]



0905DTSMDTJEIN
EN, TH
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ENGLISH

This unit is designed to operate on **12 V DC, NEGATIVE ground electrical systems**. If your vehicle does not have this system, a voltage inverter is required, which can be purchased at JVC car audio dealers.

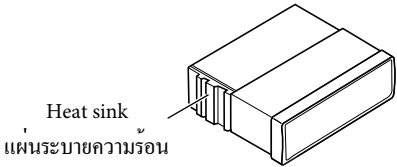
WARNINGS

To prevent short circuits, we recommend that you disconnect the battery’s negative terminal and make all electrical connections before installing the unit.

- **Be sure to ground this unit to the car’s chassis again after installation.**

Notes:

- Replace the fuse with one of the specified rating. If the fuse blows frequently, consult your JVC car audio dealers.
- It is recommended to connect to the speakers with maximum power of more than 50 W (both at the rear and at the front, with an impedance of **4 Ω to 8 Ω**). If the maximum power is less than 50 W, change “AMP GAIN” setting to prevent the speakers from being damaged (see page 13 of the INSTRUCTIONS).
- To prevent short-circuit, cover the terminals of the UNUSED leads with insulating tape.
- The heat sink becomes very hot after use. Be careful not to touch it when removing this unit.



ไทย

ชุดประกอบนี้ได้รับการออกแบบมาเพื่อใช้งานกับระบบ กระแสไฟฟ้าสายดินขั้วลบกระแสดตรง **12 โวลท์** หากรถยนต์ของคุณไม่
ใช้ระบบนี้ ต้องใช้เครื่องแปลงกระแสไฟช่วย ซึ่งสามารถหาซื้อได้จากร้านขายเครื่องเสียงรถยนต์ JVC

คำเตือน

- เพื่อป้องกันการเกิดไฟฟ้าลัดวงจรขอแนะนำให้ปลดขั้วแบตเตอรี่ลบออกแล้วจึงต่อสายไฟก่อนติดตั้งเครื่อง
- ตรวจสอบให้แน่ใจว่าได้เดินสายดินต่อระหว่างเครื่องกับตัวถัง รถยนต์ใหม่แล้วหลังจากติดตั้ง

หมายเหตุ:

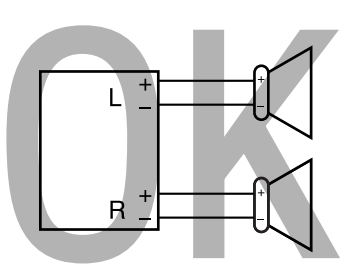
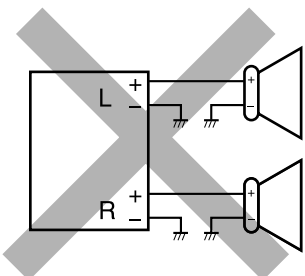
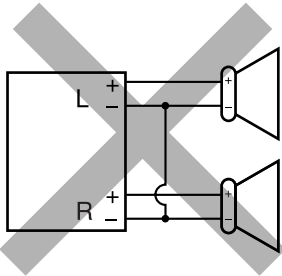
- ใช้ฟิวส์เฉพาะแทนฟิวส์ หากฟิวส์ขาดบ่อย ให้ปรึกษา ร้านขายเครื่องเสียงรถยนต์ JVC
- ขอแนะนำให้ต่อลำโพง ที่มีกำลังขับสูงสุดเกินกว่า 50 W (ทั้งด้านหน้าและด้านหลัง มีความต้านทาน **4 Ω ถึง 8 Ω**) ถ้ากำลังขับต่ำกว่า 50 W ให้เปลี่ยนค่า “AMP GAIN” เพื่อป้องกันไม่ให้ลำโพงชำรุด (ดูหน้า 13 คำแนะนำ)
- การป้องกันการลัดวงจร จะต้องพันขั้วสายตะกั่ว **ที่ไม่ใช่แล้วด้วยเท** ปพันสายไฟ
- แผ่นระบายความร้อนจะร้อนมากหลังจากใช้ ระวังอย่าไป สัมผัสเมื่อถอดชุดประกอบนี้

PRECAUTIONS on power supply and speaker connections:

- **DO NOT connect the speaker leads of the power cord to the car battery; otherwise, the unit will be seriously damaged.**
- BEFORE connecting the speaker leads of the power cord to the speakers, check the speaker wiring in your car.

ข้อควรระวังสำหรับการต่อแหล่งจ่ายกำลังและลำโพง:

- อย่าต่อสายตะกั่วเคเบิลกำลังของลำโพงเข้ากับแบตเตอรี่รถยนต์ มิฉะนั้น ชุดประกอบจะได้รับความเสียหายมาก
- ก่อนที่จะต่อสายตะกั่วเคเบิลกำลังของลำโพงเข้ากับลำโพง ให้ตรวจสอบการเดินสายไฟลำโพงในรถของคุณให้เรียบร้อยเสียก่อน



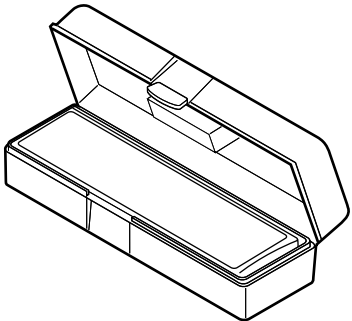
Parts list for installation and connection

The following parts are provided for this unit. After checking them, please set them correctly.

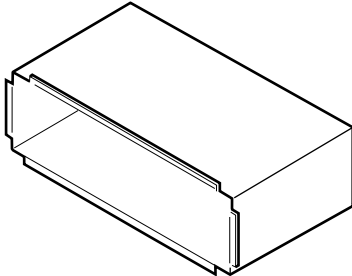
รายการส่วนประกอบสำหรับติดตั้งและเชื่อมต่อกัน

ส่วนประกอบต่อไปนี้ให้มาพร้อมกับชุดประกอบนี้ หลังจากตรวจสอบแล้ว ปรับตั้งเครื่องให้ถูกต้อง

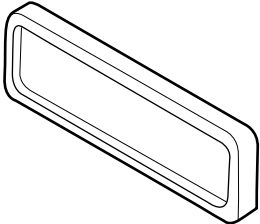
Ⓐ / Ⓑ
Hard case/Control panel
ลิ้นบรรจุ/หน้าปัด



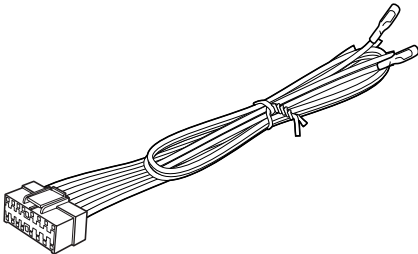
Ⓒ
Sleeve
ปลอกหุ้ม



Ⓓ
Trim plate
แผ่นโลหะขอบแต่ง



Ⓔ
Power cord
สายเคเบิลกำลัง



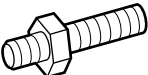
Ⓕ
Washer (ø5)
ประเก็นวงแหวน (ø5)



Ⓖ
Lock nut (M5)
นอตล็อก (M5)



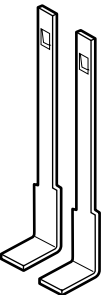
Ⓗ
Mounting bolt (M5 × 20 mm)
สลักติด (M5 × 20 มม.)



Ⓛ
Rubber cushion
ยางกันกระแทก

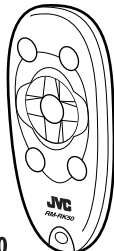


Ⓜ
Handles
คันบังคับ



Ⓚ
Remote controller
รีโมตคอนโทรล

RM-RK50



Ⓛ
Battery
แบตเตอรี่

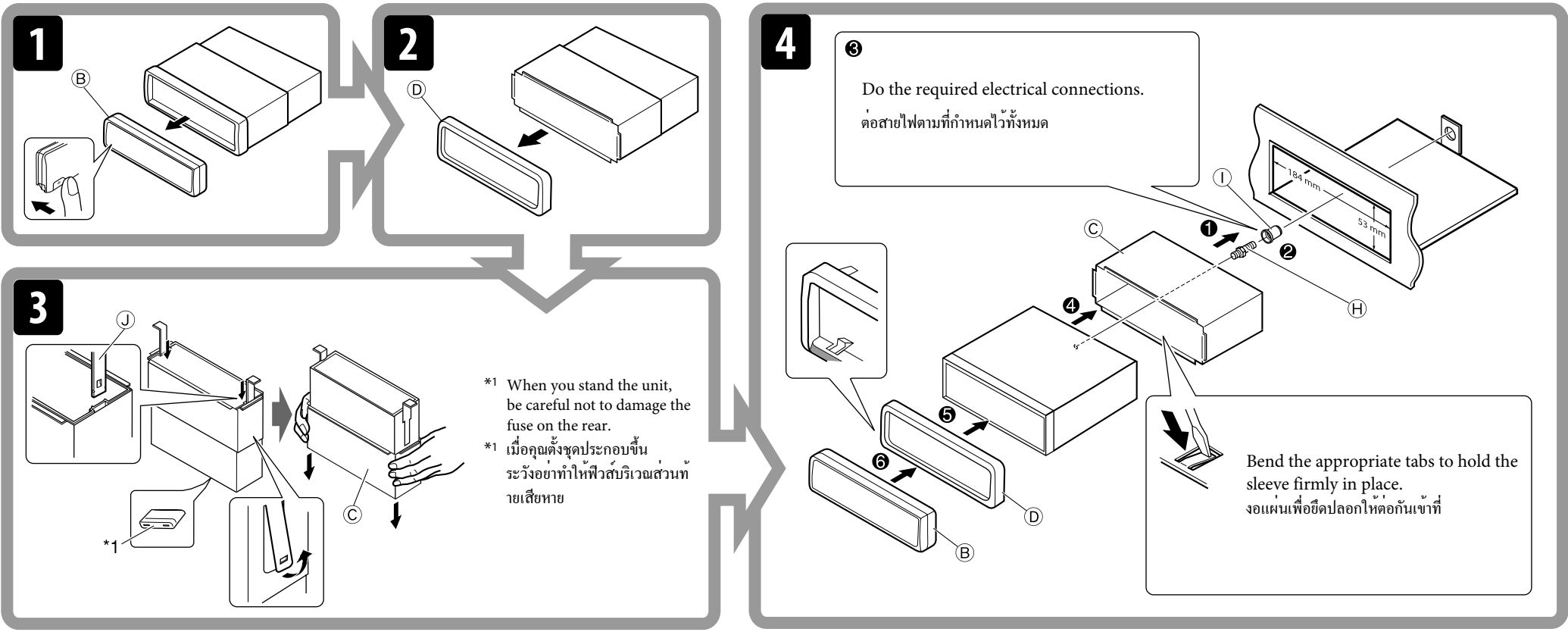
CR2025



INSTALLATION (IN-DASH MOUNTING)

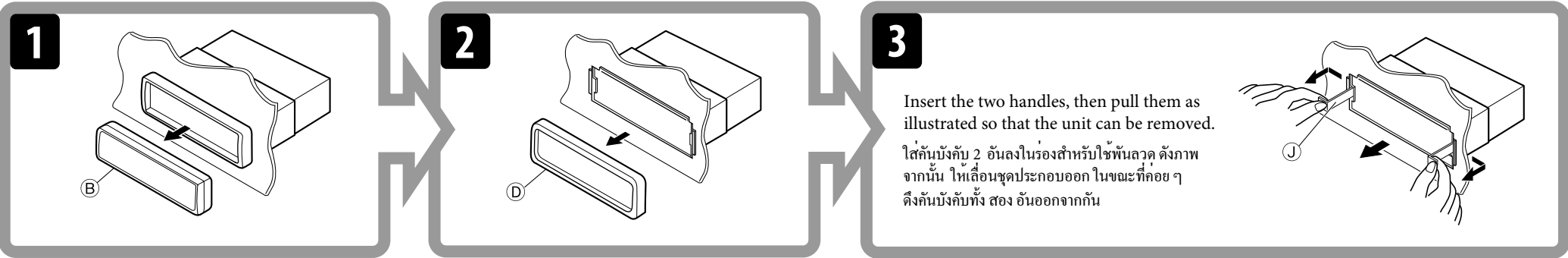
The following illustration shows a typical installation. If you have any questions or require information regarding installation kits, consult your JVC car audio dealers or a company supplying kits.

- If you are not sure how to install this unit correctly, have it installed by a qualified technician.



Removing the unit

Before removing the unit, release the rear section.



การติดตั้ง (การประกอบแผงหน้าปัทม์เข้า)

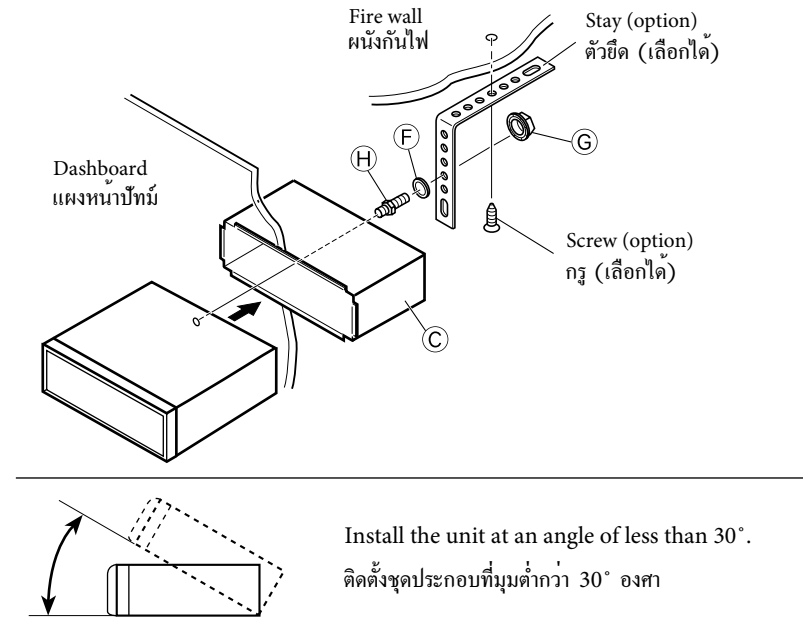
ภาพตัวอย่างต่อไปนี้แสดงถึงการติดตั้งแบบทั่วไป หากคุณมีปัญหาหรือต้องการข้อมูลเกี่ยวกับชุดติดตั้ง กรุณาปรึกษากับผู้ขายเครื่องเสียงรถยนต์ JVC ของท่านหรือบริษัท

- ชุดประกอบ ถ้าคุณไม่แน่ใจว่าติดตั้งชุดประกอบนี้ถูกต้องหรือไม่ ให้หาช่างผู้เชี่ยวชาญเป็นผู้ติดตั้ง

การถอดชุดประกอบ

ก่อนจะถอดชุดประกอบ ให้ปลดหน้าปัดส่วนท้ายก่อน

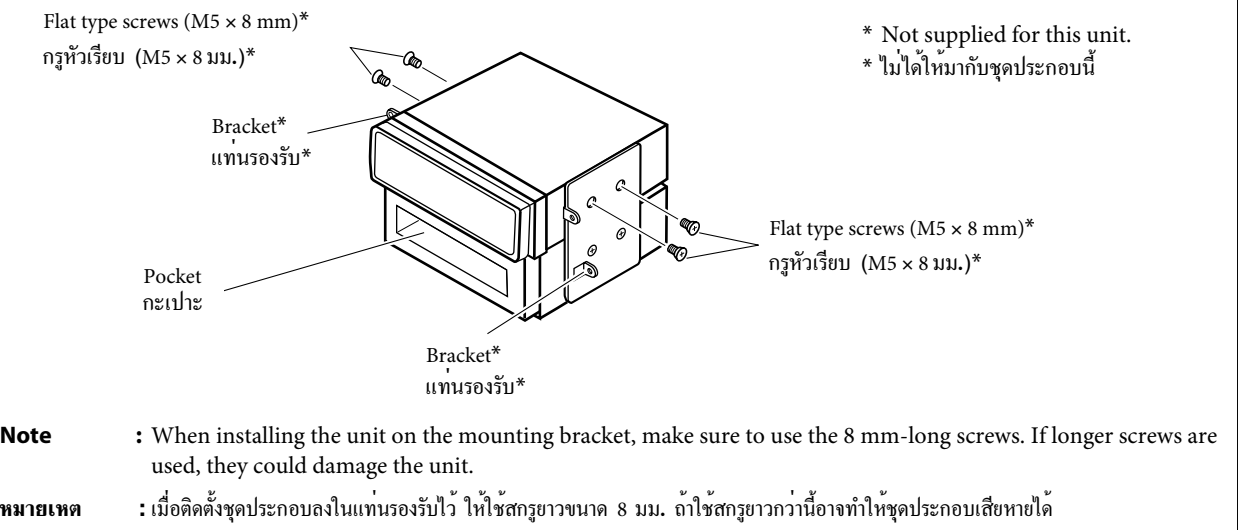
When using the optional stay / เมื่อใช้ตัวยึดแบบเลือกได้



When installing the unit without using the sleeve / เมื่อติดตั้งชุดประกอบโดยไม่ใช้ปลอกหุ้ม

In a Toyota for example, first remove the car radio and install the unit in its place.

ตัวอย่างเช่น ในรถยนต์โตโยต้า ให้ถอดวิทยุติดรถยนต์ออกก่อนและติดตั้งชุดประกอบนี้เข้าไปแทน



TROUBLESHOOTING

- The fuse blows.**
 - * Are the red and black leads connected correctly?
- Power cannot be turned on.**
 - * Is the yellow lead connected?
- No sound from the speakers.**
 - * Is the speaker output lead short-circuited?
- Sound is distorted.**
 - * Is the speaker output lead grounded?
 - * Are the “-” terminals of L and R speakers grounded in common?
- Noise interfere with sounds.**
 - * Is the rear ground terminal connected to the car’s chassis using shorter and thicker cords?
- This unit becomes hot.**
 - * Is the speaker output lead grounded?
 - * Are the “-” terminals of L and R speakers grounded in common?
- This unit does not work at all.**
 - * Have you reset your unit?

การตรวจสอบปัญหายัดข้อง

- ฟิวส์ขาด**
 - * มีการเชื่อม ขั้วสายดำและสีแดงอย่างถูกต้องหรือไม่
- ไม่สามารถเปิดเครื่องได้**
 - * มีการเชื่อมสายขั้วสายสีเหลืองหรือไม่
- ไม่มีเสียงออกจากลำโพง**
 - * สายขั้วสายที่ออกทางลำโพงเกิดไฟฟ้าลัดวงจรหรือไม่
- เสียงเพี้ยน**
 - * สายขั้วสายที่ออกทางลำโพงต่อลงดินหรือไม่
 - * สายขั้วสาย “-” ของลำโพงด้านซ้ายและขวาต่อลงดินตามปกติหรือไม่
- เสียงรบกวน**
 - * มีการใช้สายสั้นๆ หรือหนาๆ ต่อจากเครื่องส่วนที่ติดตั้ง ไว้บนพื้นด้านหลังกับตัวถังรถยนต์หรือไม่
- ชุดประกอบร้อนขึ้น**
 - * สายขั้วสายที่ออกทางลำโพงต่อลงดินหรือไม่
 - * สายขั้วสาย “-” ของลำโพงด้านซ้ายและขวาต่อลงดินตามปกติหรือไม่
- เครื่องรับนี้ทำงานไม่**
 - * ท่านได้ตั้งเครื่องใหม่แล้วหรือยัง

ELECTRICAL CONNECTIONS

การเชื่อมต่อใช้ไฟฟ้า

A Typical Connections / การเชื่อมต่อแบบปกติ

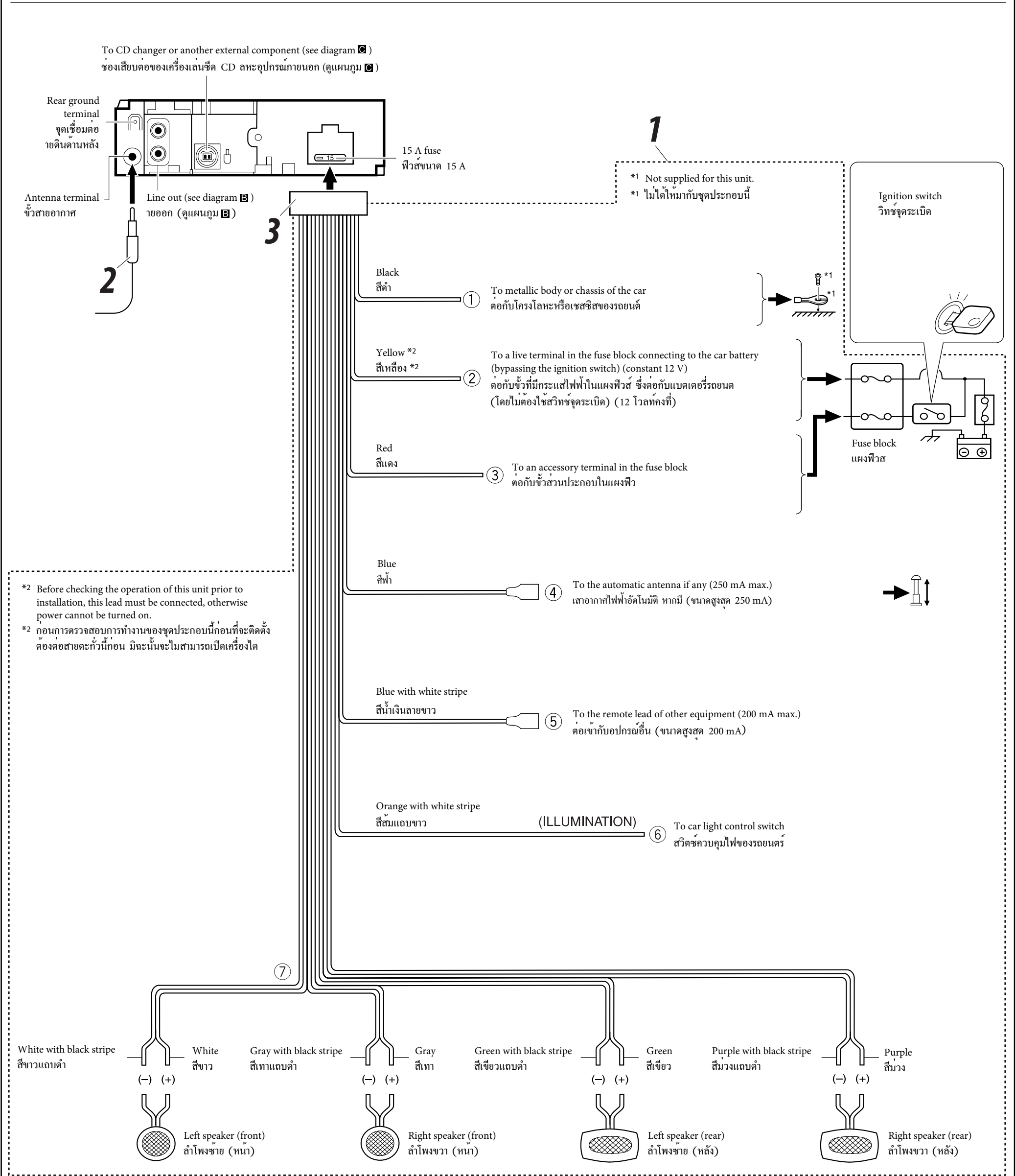
- Before connecting:** Check the wiring in the vehicle carefully. Incorrect connection may cause serious damage to this unit.

The leads of the power cord and those of the connector from the car body may be different in color.

 - 1 Connect the colored leads of the power cord in the order specified in the illustration below.
 - 2 Connect the antenna cord.
 - 3 Finally connect the wiring harness to the unit.
- ก่อนทำการเชื่อมต่อ:** ตรวจสอบสายไฟในรถอย่างละเอียดการเชื่อมต่อที่ไม่ถูกต้องอาจก่อให้เกิดความเสียหายร้ายแรงต่อชุดประกอบ

สายไฟของสายไฟและสายของปลั๊กที่เชื่อมกับตัวรถ อาจมีสีที่ไม่เหมือนกัน

 - 1 ต่อสายไฟสีตามลำดับที่ระบุในรูปด้านล่าง
 - 2 เชื่อมต่อกับสายอากาศ
 - 3 สุดท้าย ต่อส่วนควบคุมการเดินสายไฟเข้ากับชุดประกอบชุดนี้



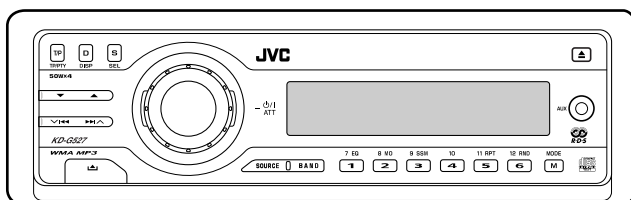
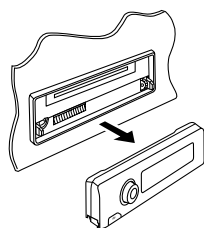
JVC



CD RECEIVER

РЕСИВЕР С ПРОИГРЫВАТЕЛЕМ КОМПАКТ-ДИСКОВ

KD-G527



WMA MP3



В соответствии с Законом Российской Федерации “О защите прав потребителей” срок службы (годности) данного товара “по истечении которого он может представлять опасность для жизни, здоровья потребителя, причинять вред его имуществу или окружающей среде” составляет семь (7) лет со дня производства. Этот срок является временем, в течение которого потребитель данного товара может безопасно им пользоваться при условии соблюдения инструкции по эксплуатации данного товара, проводя необходимое обслуживание, включающее замену расходных материалов и/или соответствующее ремонтное обеспечение в специализированном сервисном центре.

Дополнительные косметические материалы к данному товару, поставляемые вместе с ним, могут храниться в течение двух (2) лет со дня его производства.

Срок службы (годности), кроме срока хранения дополнительных косметических материалов, упомянутых в предыдущих двух пунктах, не затрагивает никаких других прав потребителя, в частности, гарантийного свидетельства JVC, которое он может получить в соответствии с законом о правах потребителя или других законов, связанных с ним.

For canceling the display demonstration, see page 6.

Информацию об отмене демонстрации функций дисплея см. на стр. 6.

For installation and connections, refer to the separate manual.

Указания по установке и выполнению соединений приводятся в отдельной инструкции.

INSTRUCTIONS

ИНСТРУКЦИИ ПО ЭКСПЛУАТАЦИИ



GET0340-001A

[EE]

ENGLISH

РУССКИЙ

Thank you for purchasing a JVC product.

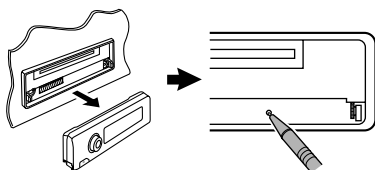
Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

IMPORTANT FOR LASER PRODUCTS

1. CLASS 1 LASER PRODUCT
2. **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
3. **CAUTION:** Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED OUTSIDE THE UNIT.

CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM.	ADVARSEL: Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling.	VARNING: Synlig och osynlig laserstråling när den öppnas och spårren är urkopplad. Betrakta strålen.	VARO: Avtäckta ja suojalukitus ohittettuna tai viallisena oled alttina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)
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How to reset your unit

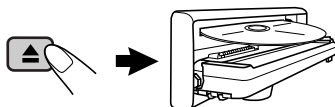


Your preset adjustments will also be erased.

How to forcibly eject a disc



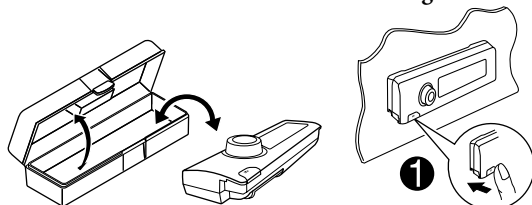
“PLEASE” and “EJECT” appear alternately on the display.



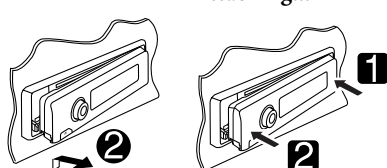
- If this does not work, reset your unit.
- Be careful not to drop the disc when it ejects.

How to detach/attach the control panel

Detaching...



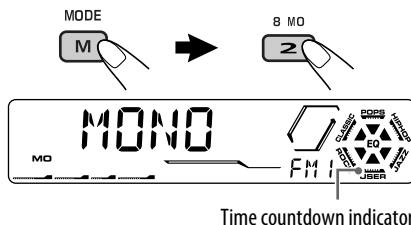
Attaching...



How to use the M MODE button

If you press M MODE, the unit goes into functions mode, then the number buttons and ▲/▼ buttons work as different function buttons.

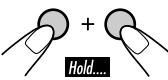
Ex.: When number button 2 works as MO (monaural) button.



To use these buttons for their original functions again after pressing M MODE, wait for 5 seconds without pressing any of these buttons until the functions mode is cleared or press M MODE again.

How to read this manual

- Button operations are mainly explained with the illustrations in the table below.
- Some related tips and notes are explained in “More about this unit” (see pages 19 – 21).

	Press briefly.
	Press repeatedly.
	Press either one.
	
	Press and hold until your desired response begins.
	Press and hold both buttons at the same time.

The following marks are used to indicate...

 : Built-in CD player operations.

 : External CD changer operations.

 : Indicator displayed for the corresponding operation.

Warning:

If you need to operate the unit while driving, be sure to look ahead carefully or you may be involved in a traffic accident.

Caution on volume setting:

Discs produce very little noise compared with other sources. Lower the volume before playing a disc to avoid damaging the speakers by the sudden increase of the output level.

CONTENTS

Control panel	4
Remote controller — RM-RK50	5
Getting started	6
Basic operations	6
Radio operations	7
FM RDS operations	8
Searching for your favorite FM RDS programme ...	8
Disc operations	10
Playing a disc in the unit	10
Playing discs in the CD changer	10
Sound adjustments	13
General settings — PSM	14
External component operations	17
DAB tuner operations	18
More about this unit	19
Maintenance	22
Troubleshooting	23
Specifications	25

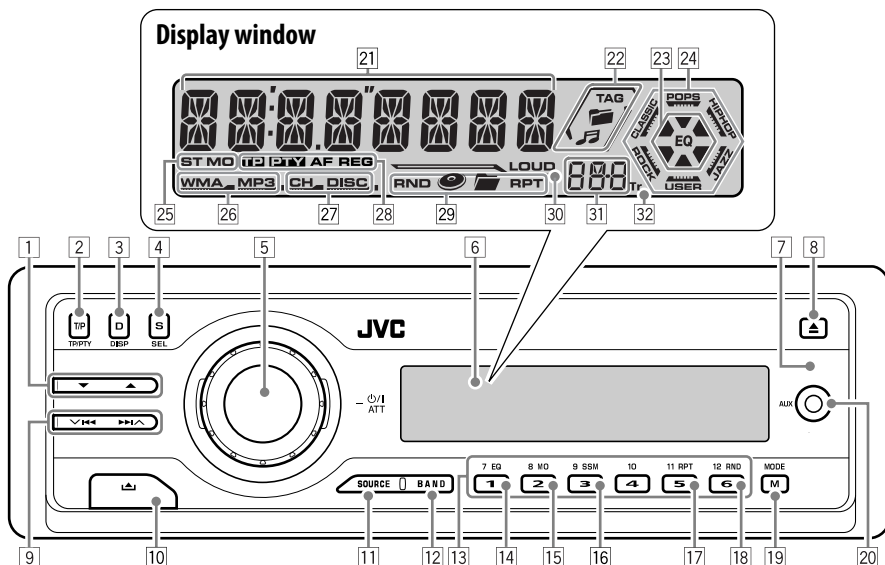
For safety...

- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operations.

Temperature inside the car...

If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.

Parts identification

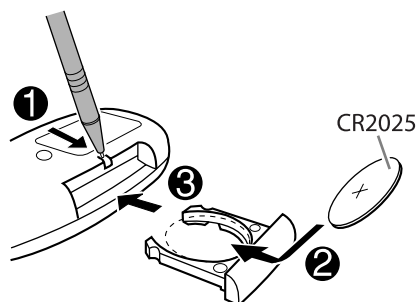


- 1 ▲ (up) / ▼ (down) buttons
- 2 T/P TP/PTY (traffic programme/
programme type) button
- 3 D DISP (display) button
- 4 S SEL (select) button
- 5
 - Control dial
 -  I ATT (standby/on attenuator) button
- 6 Display window
- 7 Remote sensor
 - *DO NOT expose the remote sensor to
strong light (direct sunlight or artificial
lighting).*
- 8 ▲ (eject) button
- 9 ▼ |◀◀|▶▶| ▲ buttons
- 10  (control panel release) button
- 11 SOURCE button
- 12 BAND button
- 13 Number buttons
- 14 EQ (equalizer) button
- 15 MO (monaural) button
- 16 SSM (Strong-station Sequential Memory)
button
- 17 RPT (repeat) button
- 18 RND (random) button
- 19 M MODE button
- 20 AUX (auxiliary) input jack

Display window

- 21 Main display
- 22 Disc information indicators—TAG (ID3 Tag),  (folder),  (track/file)
- 23 EQ (equalizer) indicator
- 24 Sound mode (C-EQ: custom equalizer) indicators—ROCK, CLASSIC, POPS, HIP HOP, JAZZ, USER
 -  also works as the time countdown indicator and level meter during play (see page 16).
- 25 Tuner reception indicators—ST (stereo), MO (monaural)
- 26 Disc type indicators—WMA, MP3
- 27 Playback source indicators—
CH: *Lights up only when CD-CH is selected as the playback source.*
DISC: *Lights up for the built-in CD player.*
- 28 RDS indicators—TP, PTY, AF, REG
- 29 Playback mode / item indicators—
RND (random),  (disc),  (folder),
RPT (repeat)
- 30 LOUD (loudness) indicator
- 31 Source display / Volume level indicator
- 32 Tr (track) indicator

Installing the lithium coin battery (CR2025)

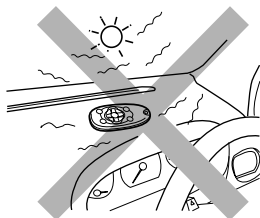


Aim the remote controller directly at the remote sensor on the unit. Make sure there is no obstacle in between.

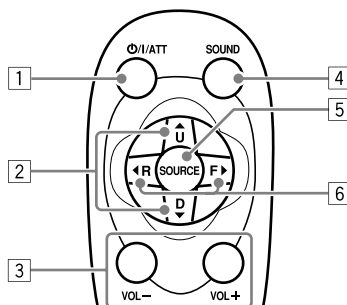
Warning:

- Do not install any battery other than CR2025 or its equivalent; otherwise, it may explode.
- Store the battery in a place where children cannot reach to avoid risk of accident.
- To prevent the battery from over-heating, cracking, or starting a fire:
 - Do not recharge, short, disassemble, heat the battery, or dispose of it in a fire.
 - Do not leave the battery with other metallic materials.
 - Do not poke the battery with tweezers or similar tools.
 - Wrap the battery with tape and insulate when throwing away or saving it.

Caution:



Main elements and features

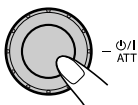


- 1** Φ /I/ATT (standby/on/attenuator) button
 - Turns the power on if pressed briefly or attenuates the sound when power is on.
 - Turns the power off if pressed and held.
- 2** $\blacktriangle$ U (up) / D (down) $\blacktriangledown$ buttons
 - Changes the FM/AM/DAB bands with $\blacktriangle$ U only.
 - Changes the preset stations (or services) with D $\blacktriangledown$ only.
 - Changes the folder of the MP3/WMA discs.
 - While playing an MP3 disc on an MP3-compatible CD changer:
 - Changes the disc if pressed briefly.
 - Changes the folder if pressed and held.
- 3** VOL – / VOL + buttons
 - Adjusts the volume level.
- 4** SOUND button
 - Selects the sound mode (C-EQ: custom equalizer).
- 5** SOURCE button
 - Selects the source.
- 6** $\blacktriangleleft$ R (reverse) / F (forward) $\blacktriangleright$ buttons
 - Searches for stations (or services) if pressed briefly.
 - Searches for ensembles if pressed and held.
 - Fast-forwards or reverses the track if pressed and held.
 - Changes the tracks of the disc if pressed briefly.

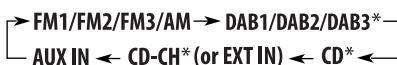
Getting started

Basic operations

- 1 Turn on the power.



- 2



- Select “CD-CH” when using an Apple iPod® or a JVC D. player (see page 17).

iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.

* You cannot select these sources if they are not ready.

- 3

- For FM/AM tuner

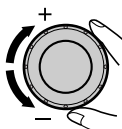


- For DAB tuner

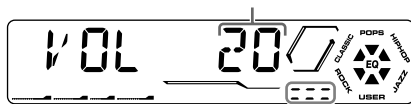


- 4

- Adjust the volume.



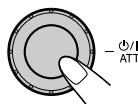
Volume level appears.



Volume level indicator

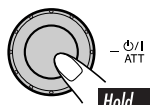
- 5 Adjust the sound as you want. (See pages 13 and 14.)

To drop the volume in a moment (ATT)



To restore the sound, press it again.

To turn off the power



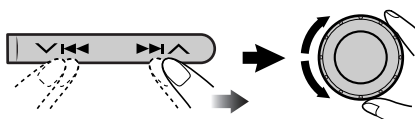
Basic settings

- See also “General settings — PSM” on pages 14 – 16.

- 1



- 2



- 1 Canceling the display demonstrations

Select “DEMO,” then “DEMO OFF.”

- 2 Setting the clock

Select “CLOCK H” (hour), then adjust the hour.

Select “CLOCK M” (minute), then adjust the minute.

Select “24H/12H,” then “24H” (hour) or “12H” (hour).

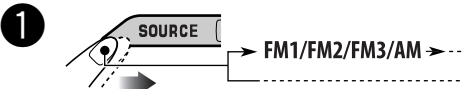
- 3 Finish the procedure.



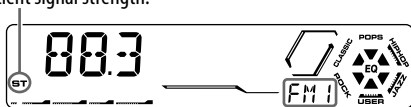
To check the current clock time when the power is turned off



Radio operations

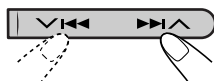


Lights up when receiving an FM stereo broadcast with sufficient signal strength.



Selected band appears.

3 Start searching for a station.



When a station is received, searching stops.

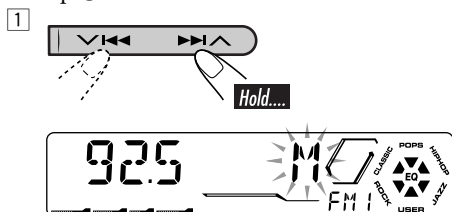
To stop searching, press the same button again.

Note:

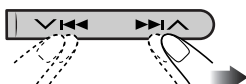
FM1 and FM2: 87.5 MHz – 108.0 MHz
FM3: 65.00 MHz – 74.00 MHz

To tune in to a station manually

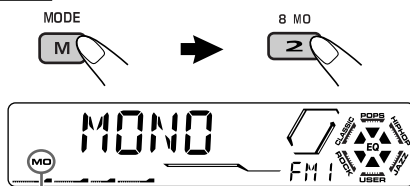
In step 3 above...



2 Select the desired station frequencies.



When an FM stereo broadcast is hard to receive



Lights up when monaural mode is activated.

Reception improves, but stereo effect will be lost.

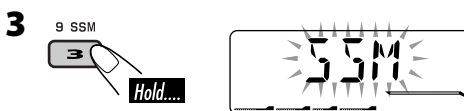
To restore the stereo effect, repeat the same procedure. "MONO OFF" appears and the MO indicator goes off.

Storing stations in memory

You can preset six stations for each band.

FM station automatic presetting—SSM (Strong-station Sequential Memory)

1 Select the FM band (FM1 – FM3) you want to store into.

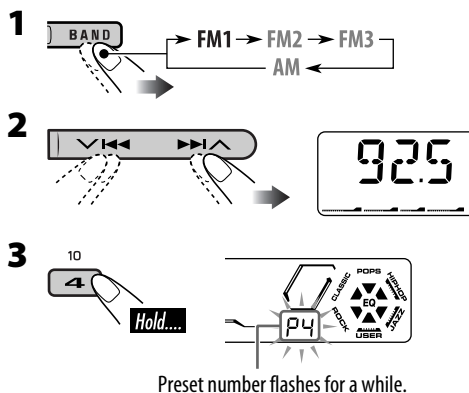


"SSM" flashes, then disappears when automatic presetting is over.

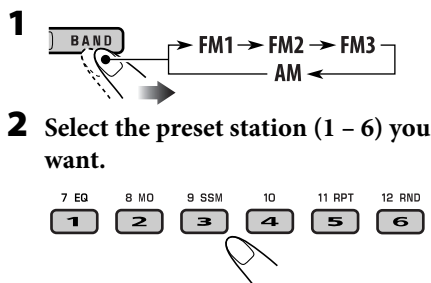
Local FM stations with the strongest signals are searched and stored automatically in the FM band.

Manual presetting

Ex.: Storing FM station of 92.5 MHz into preset number 4 of the FM1 band.



Listening to a preset station



To check the current clock time while listening to an FM (non-RDS) or AM station

- For FM RDS stations, see page 10.



FM RDS operations

What you can do with RDS

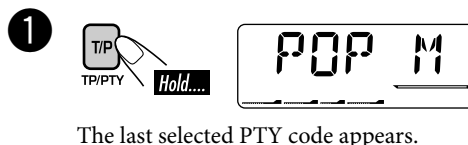
RDS (Radio Data System) allows FM stations to send an additional signal along with their regular programme signals. By receiving the RDS data, this unit can do the following:

- Programme Type (PTY) Search (see the following)
- TA (Traffic Announcement) and PTY Standby Receptions (see pages 9 and 15)
- Tracing the same programme automatically —Network-Tracking Reception (see page 10)
- Programme Search (see page 15)

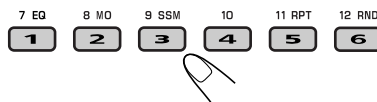
Searching for your favorite FM RDS programme

You can tune in to a station broadcasting your favorite programme by searching for a PTY code.

- To store your favorite programme types, see page 9.

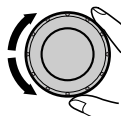


Select one of your favorite programme types.

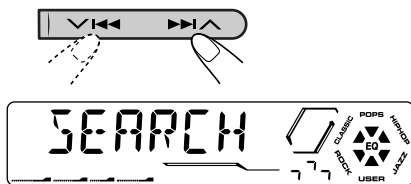


or

Select one of the PTY codes (see page 10).



- 3** Start searching for your favorite programme.



If there is a station broadcasting a programme of the same PTY code as you have selected, that station is tuned in.

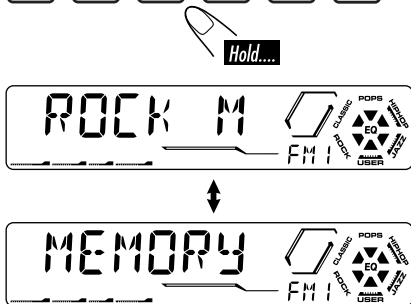
Storing your favorite programme types

You can store six favorite programme types.

Preset programme types in the number buttons (1 to 6):

1	2	3	4	5	6
POP M	ROCK M	EASY M	CLASSICS	AFFAIRS	VARIED

- Select a PTY code (see page 8).
- Select the preset number (1 – 6) you want to store into.



Ex.: When "ROCK M" is selected

- Repeat steps 1 and 2 to store other PTY codes into other preset numbers.
- Finish the procedure.



Using the standby receptions

TA Standby Reception

TA Standby Reception allows the unit to switch temporarily to Traffic Announcement (TA) from any source other than AM.

The volume changes to the preset TA volume level (see page 15).

To activate TA Standby Reception



The TP (Traffic Programme) indicator either lights up or flashes.

- If the TP indicator lights up, TA Standby Reception is activated.
- If the TP indicator flashes, TA Standby Reception is not yet activated. (This occurs when you are listening to an FM station without the RDS signals required for TA Standby Reception.)

To activate TA Standby Reception, tune in to another station providing these signals. The TP indicator will stop flashing and remain lit.

To deactivate the TA Standby Reception



The TP indicator goes off.

PTY Standby Reception

PTY Standby Reception allows the unit to switch temporarily to your favorite PTY programme from any source other than AM.

To activate and select your favorite PTY code for PTY Standby Reception, see page 15.

The PTY indicator either lights up or flashes.

- If the PTY indicator lights up, PTY Standby Reception is activated.
 - If the PTY indicator flashes, PTY Standby Reception is not yet activated.
- To activate PTY Standby Reception, tune in to another station providing these signals. The PTY indicator will stop flashing and remain lit.

To deactivate the PTY Standby Reception, select "OFF" for the PTY code (see page 15). The PTY indicator goes off.

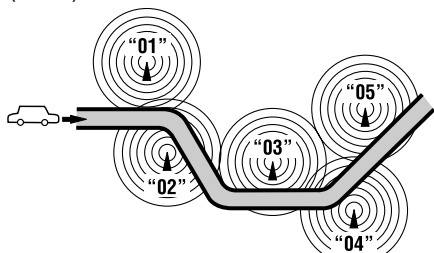
Tracing the same programme— Network-Tracking Reception

When driving in an area where FM reception is not sufficient enough, this unit automatically tunes in to another FM RDS station of the same network, possibly broadcasting the same programme with stronger signals (see the illustration below).

When shipped from the factory, Network-Tracking Reception is activated.

To change the Network-Tracking Reception setting, see “AF-REG” on page 15.

Programme A broadcasting on different frequency areas (01 – 05)



To check the current clock time while listening to an FM RDS station



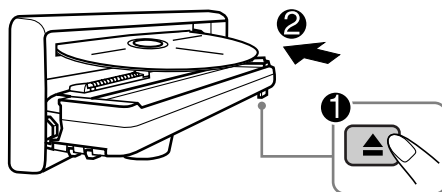
**Station name (PS) → Station
Frequency → Programme type
(PTY) → Clock → (back to the
beginning)**

PTY codes

NEWS, AFFAIRS, INFO, SPORT, EDUCATE,
DRAMA, CULTURE, SCIENCE, VARIED,
POP M (music), ROCK M (music), EASY
M (music), LIGHT M (music), CLASSICS,
OTHER M (music), WEATHER, FINANCE,
CHILDREN, SOCIAL, RELIGION, PHONE
IN, TRAVEL, LEISURE, JAZZ, COUNTRY,
NATION M (music), OLDIES, FOLK M
(music), DOCUMENT

Disc operations

Playing a disc in the unit



All tracks will be played repeatedly until you change the source or eject the disc.

To stop play and eject the disc

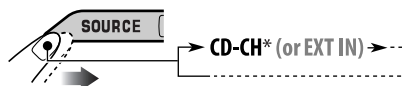


Playing discs in the CD changer

All discs in the magazine will be played repeatedly until you change the source.

- Ejecting the magazine will also stop playing.

1



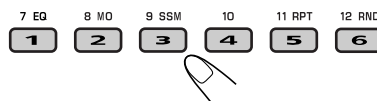
* If you have changed “EXT IN” setting to “EXT IN” (see page 16), you cannot select the CD changer.

See also page 17 when using an iPod or JVC D. player.

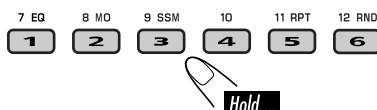
2

Select a disc.

For disc number from 01 – 06:



For disc number from 07 – 12:



About MP3 and WMA discs

MP3 and WMA “tracks” (words “file” and “track” are used interchangeably) are recorded in “folders.”

About the CD changer

It is recommended to use a JVC MP3-compatible CD changer with your unit.

- You can also connect other CH-X series CD changers (except CH-X99 and CH-X100). These units are not compatible with MP3 discs.
- You cannot play any WMA disc in the CD changer.
- You cannot use the KD-MK series CD changers with this unit.
- Disc text information recorded in the CD Text can be displayed when a JVC CD Text compatible CD changer is connected.
- For connection, see Installation/Connection Manual (separate volume).

To locate a particular track (for CD) or folder (for MP3 or WMA discs) directly



To select a number from 01 – 06:



To select a number from 07 – 12:

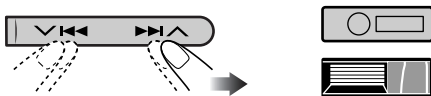


- To use folder search on MP3/WMA discs, it is required that folders are assigned with 2-digit numbers at the beginning of their folder names—01, 02, 03, and so on.

To fast-forward or reverse the track



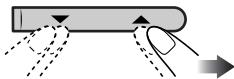
To go to the next or previous tracks



To go to the next or previous folders (only for MP3 or WMA discs)

For MP3 discs:

For WMA discs:



Other main functions

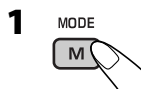
■ Skipping a track quickly during play



Only possible on JVC
MP3-compatible CD changer

- For MP3 or WMA disc, you can skip a track within the same folder.

Ex.: To select track 32 while playing track 6



Each time you press the button, you can skip 10 tracks.

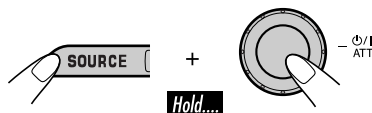
- After the last track, the first track will be selected and vice versa.



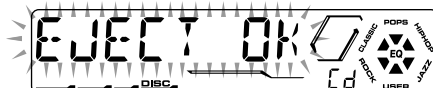
■ Prohibiting disc ejection



You can lock a disc in the loading slot.



To cancel the prohibition, repeat the same procedure.



Changing the display information

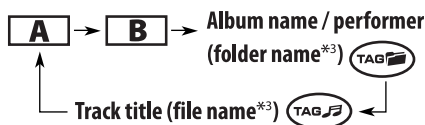


■ While playing an audio CD or a CD Text

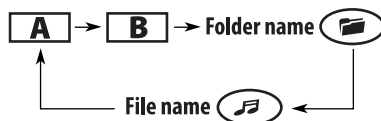


■ While playing an MP3 or WMA*2 disc

- When "TAG DISP" is set to "TAG ON" (see page 16)



- When "TAG DISP" is set to "TAG OFF"



A : Elapsed playing time with the current track number

B : Clock with the current track number

*1 If the current disc is an audio CD, "NO NAME" appears.

*2 Only for the built-in CD player.

*3 If an MP3/WMA file does not have ID3 tags, folder name and file name appear. In this case, the TAG indicator will not light up.

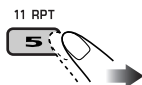
Selecting the playback modes

You can use only one of the following playback modes at a time.



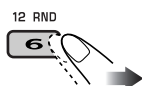
2 Select your desired playback mode.

■ Repeat play



Mode	Plays repeatedly
TRK RPT	: The current track.
FLDR RPT *1	: All tracks of the current folder.
DISC RPT *2	: All tracks of the current disc.
RPT OFF	: Cancels.

■ Random play



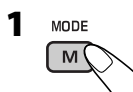
Mode	Plays at random
FLDR RND *1	: All tracks of the current folder, then tracks of the next folder and so on.
DISC RND	: All tracks of the current disc.
MAG RND *2	: All tracks of the inserted discs.
RND OFF	: Cancels.

*1 Only while playing an MP3 or WMA disc.

*2 Only while playing discs in the CD changer.

Sound adjustments

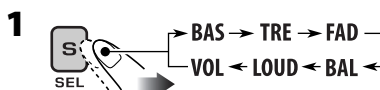
You can select a preset sound mode suitable to the music genre (C-EQ: custom equalizer).



Preset values Indication (For)	BAS (bass)	TRE (treble)	LOUD (loudness)
USER (Flat sound)	00	00	OFF
ROCK (Rock or disco music)	+03	+01	ON
CLASSIC (Classical music)	+01	-02	OFF
POPS (Light music)	+04	+01	OFF
HIP HOP (Funk or rap music)	+02	00	ON
JAZZ (Jazz music)	+02	+03	OFF

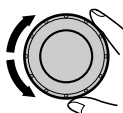
Adjusting the sound

You can adjust the sound characteristics to your preference.

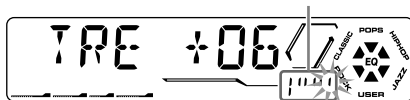


To be continued...

2



Indication pattern changes as you adjust the level.



Ex.: When "TRE" is selected

Indication [Range]

BAS*¹ (bass)

Adjust the bass. [-06 to +06]

TRE*¹ (treble)

Adjust the treble. [-06 to +06]

FAD*² (fader)

Adjust the front and rear speaker balance.
[R06 to F06]

BAL (balance)

Adjust the left and right speaker balance.
[L06 to R06]

LOUD*¹ (loudness)

Boost low and high frequencies to produce
a well-balanced sound at low volume level.
[LOUD ON or LOUD OFF]

VOL (volume)

Adjust the volume. [00 to 30 or 50*³]

*¹ When you adjust the bass, treble, or loudness,
the adjustment you have made is stored for
the currently selected sound mode (C-EQ)
including "USER."

*² If you are using a two-speaker system, set the
fader level to "00."

*³ Depending on the amplifier gain control
setting. (See page 16 for details.)

General settings — PSM

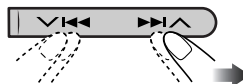
You can change PSM (Preferred Setting Mode)
items listed in the table that follows.

1



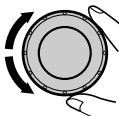
Hold....

2 Select a PSM item.



Ex.: When you select "DIMMER"

3 Adjust the PSM item selected.



4 Repeat steps 2 and 3 to adjust the
other PSM items if necessary.

5 Finish the procedure.



Indications	Selectable settings, [reference page]	
DEMO Display demonstration	DEMO ON	: [Initial]; Display demonstration will be activated automatically if no operation is done for about 20 seconds, [6].
	DEMO OFF	: Cancels.
CLOCK H Hour adjustment	0 – 23 (1 – 12), [6] [Initial: 0 (0:00)]	
CLOCK M Minute adjustment	00 – 59, [6] [Initial: 00 (0:00)]	
24H/12H Time display mode	12H $\rightleftharpoons$ 24H, [6] [Initial: 24H]	
CLK ADJ Clock adjustment	AUTO	: [Initial]; The built-in clock is automatically adjusted using the CT (clock time) data in the RDS signal.
	OFF	: Cancels.
AF-REG * ₅ Alternative frequency/ regionalization reception	When the received signals from the current FM RDS station or DAB service become weak...	
	AF	: [Initial]; Switches to another station (or service) (the programme may differ from the one currently received), [10, 19]. • The AF indicator lights up.
	AF REG	: Switches to another station broadcasting the same programme. • The AF and REG indicators light up.
	OFF	: Cancels (not selectable when “DAB AF” is set to “AF ON”).
PTY-STBY * ₅ PTY standby	Activates PTY Standby Reception with one of the PTY codes, [9]. OFF [Initial] → PTY codes, [10] → (back to the beginning)	
TA VOL Traffic announcement volume	[Initial: VOL 15]; VOL 00 — VOL 30 or 50* ₄ , [9]	
P-SEARCH * ₅ Programme search	ON	: Using the AF data, the unit tunes in to another frequency broadcasting the same programme as the original preset RDS station is if the preset station signals are not sufficient.
	OFF	: [Initial]; Cancels.
DAB AF * ₆ Alternative frequency reception	AF ON	: [Initial]; Traces the programme among DAB services and FM RDS stations, [10, 19].
	AF OFF	: Cancels.

*₄ Depends on the amplifier gain control.

*₅ Only for FM RDS stations.

*₆ Displayed only when DAB tuner is connected.

To be continued...

Indications	Selectable settings, [reference page]	
DAB VOL * ₁ DAB volume adjustment	You can adjust the volume level (VOL -12 — VOL +12) of DAB tuner to match the FM sound level and store it in memory. [Initial: VOL 00]	
LEVEL Audio level meter	ON	: [Initial]; Activates the audio level indicator.
	OFF	: Cancels; sound mode indicator is shown.
DIMMER Dimmer	AUTO	: [Initial]; Dims the display when you turn on the headlights.
	ON	: Activates dimmer.
	OFF	: Cancels.
TEL Telephone muting	MUTING 1/MUTING 2 : Select either one which mutes the sounds while using the cellular phone.	
	OFF	: [Initial]; Cancels.
SCROLL * ₂ Scroll	ONCE	: [Initial]; Scrolls the disc information once.
	AUTO	: Repeats scrolling (5-second intervals in between).
	OFF	: Cancels.
	• Pressing D DISP for more than one second can scroll the display regardless of the setting.	
EXT IN * ₃ External input	CHANGER	: [Initial]; To use a JVC CD changer, [10], an Apple iPod, a JVC D. player, [17], and/or DAB tuner, [18].
	EXT IN	: To use another external component, [17].
AUX ADJ Auxiliary input level adjustment	A.ADJ 00 – A.ADJ 05 : Adjust the auxiliary input level to avoid the sudden increase of the output level when changing the source from external component connected to the AUX input jack on the control panel. [Initial: A.ADJ 00]	
TAG DISP Tag display	TAG ON	: [Initial]; Shows the ID3 tag while playing MP3/WMA tracks, [12].
	TAG OFF	: Cancels.
AMP GAIN Amplifier gain control	You can change the maximum volume level of this unit.	
	LOW PWR	: VOL 00 – VOL 30 (Select this if the maximum power of the speaker is less than 50 W to prevent them from damaging the speaker.)
	HIGH PWR	: [Initial]; VOL 00 – VOL 50

*₁ Displayed only when DAB tuner is connected.

*₂ Some characters or symbols will not be shown correctly (or will be blanked) on the display.

*₃ Displayed only when one of the following sources is selected—FM, AM, CD, or AUX IN.

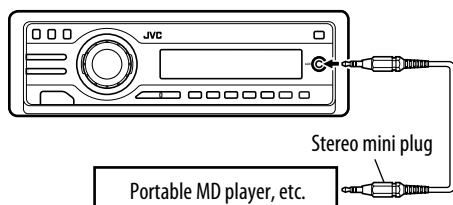
External component operations

You can connect an external component to...

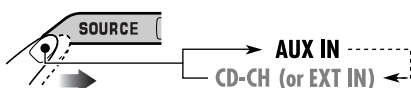
- CD changer jack on the rear using:
 - Line Input Adapter—KS-U57 (not supplied) or AUX Input Adapter—KS-U58 (not supplied) for any other components (except iPod and D. player).
 - Interface adapter for iPod®—KS-PD100 (not supplied) for controlling iPod.
 - D. player interface adapter—KS-PD500 (not supplied) for controlling D. player.
- AUX (auxiliary) input jack on the control panel.

For connection, see Installation/Connection Manual (separate volume).

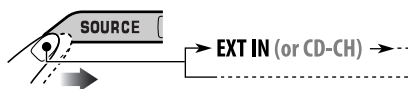
Connecting an external component to the AUX input jack



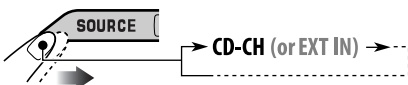
- 1 For selecting the external component connected to...
 - AUX input jack



- CD changer jack on the rear using KS-U57 or KS-U58
If "EXT IN" does not appear, see page 16 and select the external input ("EXT IN").

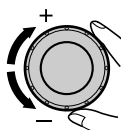


- CD changer jack on the rear using interface adapter for iPod—KS-PD100 or for D. player—KS-PD500



- 2 Turn on the connected component and start playing the source.

- 3 Adjust the volume.



- 4 Adjust the sound as you want. (See pages 13 and 14.)

To check the clock time while listening to an external component



AUX IN, EXT IN, or CD-CH* ↔ Clock

* See "While playing an MP3 or WMA disc" on page 12 for details.

DAB tuner operations

What is DAB system?

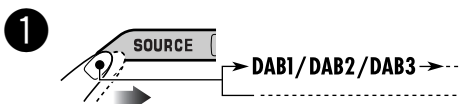
Digital Audio Broadcasting (DAB) can deliver digital quality sound without any annoying interference and signal distortion. Furthermore, it can carry text, pictures, and data. When transmitting, DAB combines several programmes (called “services”) to form one “ensemble.” In addition, each “service”—called “primary service”—can also be divided into its components (called “secondary service”). A typical ensemble has six or more programmes (services) broadcast at the same time.

By connecting the DAB tuner, this unit can do the following:

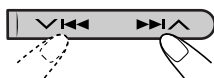
- Tracing the same programme automatically —Alternative Frequency Reception (see “DAB AF” on page 15).

It is recommended to use DAB tuner KT-DB1000 with your unit. If you have another DAB tuner, consult your JVC IN-CAR ENTERTAINMENT dealer.

- Refer also to the Instructions supplied for your DAB tuner.



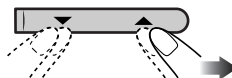
3 Start searching for an ensemble.



When an ensemble is received, searching stops.

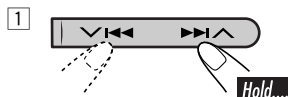
To stop searching, press the same button again.

4 Select a service (either primary or secondary) to listen to.

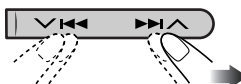


To tune in to an ensemble manually

Start searching for an ensemble, as in step 3 on the left column...



2 Select the desired ensemble frequencies.



Storing DAB services in memory

You can preset six DAB services (primary) for each band.

1 Select a service you want (see steps 1 to 4 above).

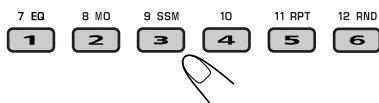
2 Select the preset number (1 – 6) you want to store into.



Preset number flashes for a while.

Tuning in to a preset DAB service

- 
- Select the preset DAB service (primary) number (1 – 6) you want.



If the selected primary service has some secondary services, pressing the same button again will tune in to the secondary services.

Tracing the same programme— Alternative Frequency Reception

You can keep listening to the same programme by activating the Alternative Frequency Reception.

- **While receiving a DAB service:**
When driving in an area where a service cannot be received, this unit automatically tunes in to another ensemble or FM RDS station, broadcasting the same programme.
- **While receiving an FM RDS station:**
When driving in an area where a DAB service is broadcasting the same programme as the FM RDS station is broadcasting, this unit automatically tunes in to the DAB service.

When shipped from the factory, Alternative Frequency Reception is activated.

To deactivate the Alternative Frequency Reception, see page 15.

To change the display information while tuning to an ensemble



Service name → Ensemble name → Channel number → Frequency → Clock → (back to the beginning)

More about this unit

Basic operations

Turning on the power

- By pressing SOURCE on the unit, you can also turn on the power. If the source is ready, playback also starts.

Turning off the power

- If you turn off the power while listening to a disc, disc play will start from where playback has been stopped previously, next time you turn on the power.

Selecting the sources

- When no disc is loaded in the unit, “CD” cannot be selected.
- “CD-CH” or “DAB” cannot be selected when the target component is not connected.

Tuner operations

Storing stations in memory

- During SSM search...
 - All previously stored stations are erased and stations are stored newly.
 - Received stations are preset in No. 1 (lowest frequency) to No. 6 (highest frequency).
 - When SSM is over, the station stored in No. 1 will be automatically tuned in.
- When storing a station manually, a previously preset station is erased when a new station is stored in the same preset number.

FM RDS operations

- Network-Tracking Reception requires two types of RDS signals—PI (Programme Identification) and AF (Alternative Frequency) to work correctly. Without receiving these data correctly, Network-Tracking Reception will not operate correctly.
- If a Traffic Announcement is received by TA Standby Reception, the volume level (TA VOL) automatically changes to the preset level.

To be continued...

- When Alternative Frequency Reception is activated (with AF selected), Network-Tracking Reception is also activated automatically. On the other hand, Network-Tracking Reception cannot be deactivated without deactivating Alternative Frequency Reception. (See page 15.)
- If you want to know more about RDS, visit «<http://www.rds.org.uk>».

Disc operations

Caution for DualDisc playback

- The Non-DVD side of a “DualDisc” does not comply with the “Compact Disc Digital Audio” standard. Therefore, the use of Non-DVD side of a DualDisc on this product may not be recommended.

General

- This unit has been designed to reproduce CDs/CD Texts, and CD-Rs (Recordable)/CD-RWs (Rewritable) in audio CD (CD-DA), MP3 and WMA formats.
- When a disc has been loaded, selecting “CD” for the playback source starts disc play.

Inserting a disc

- When a disc is inserted upside down, “PLEASE” and “EJECT” appear alternately on the display. Press  to eject the disc.
- Do not insert 8 cm discs (single CD) and unusual shape discs (heart, flower, etc.) into the loading slot.

Playing a disc

- While fast-forwarding or reversing on an MP3 or WMA disc, you can only hear intermittent sounds.

Playing a CD-R or CD-RW

- Use only “finalized” CD-Rs or CD-RWs.
- This unit can play back only the files of the same type which is first detected if a disc includes both audio CD (CD-DA) files and MP3/WMA files.

- This unit can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- Some CD-Rs or CD-RWs may not play back on this unit because of their disc characteristics, and for the following causes:
 - Discs are dirty or scratched.
 - Moisture condensation occurs on the lens inside the unit.
 - The pickup lens inside the unit is dirty.
 - CD-R/CD-RW on which the files are written with “Packet Write” method.
 - There are improper recording conditions (missing data, etc.) or media conditions (stain, scratch, warp, etc.).
- CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.
- Do not use the following CD-Rs or CD-RWs:
 - Discs with stickers, labels, or protective seal stuck to the surface.
 - Discs on which labels can be directly printed by an ink jet printer.
 Using these discs under high temperatures or high humidities may cause malfunctions or damages to the unit.

Playing an MP3/WMA disc

- This unit can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).
- This unit can show the names of albums, artists (performer), and ID3 Tag (Version 1.0, 1.1, 2.2, 2.3, or 2.4) for MP3 files and for WMA files.
- This unit can display only one-byte characters. No other characters can be correctly displayed.
- This unit can play back MP3/WMA files meeting the conditions below:
 - Bit rate: 8 kbps — 320 kbps
 - Sampling frequency: 48 kHz, 44.1 kHz, 32 kHz (for MPEG-1) 24 kHz, 22.05 kHz, 16 kHz (for MPEG-2)
 - Disc format: ISO 9660 Level 1/ Level 2, Romeo, Joliet, Windows long file name

- The maximum number of characters for file/folder names vary among the disc format used (includes 4 extension characters—<.mp3> or <.wma>).
 - ISO 9660 Level 1: up to 12 characters
 - ISO 9660 Level 2: up to 31 characters
 - Romeo*: up to 128 (72) characters
 - Joliet*: up to 64 (36) characters
 - Windows long file name*: up to 128 (72) characters
- * *The parenthetic figure is the maximum number of characters for file/folder names in case the total number of files and folders is 313 or more.*
- This unit can recognize the total of 512 files, of 200 folders, and of 8 hierarchies.
- This unit can play back the files recorded in VBR (variable bit rate).
The files recorded in VBR have a discrepancy in elapsed time display, and do not show the actual elapsed time. Especially, after performing the search function, this difference becomes noticeable.
- This unit cannot play back the following files:
 - MP3 files encoded with MP3i and MP3 PRO format.
 - MP3 files encoded in an appropriated format.
 - MP3 files encoded with Layer 1/2.
 - WMA files encoded with lossless, professional, and voice format.
 - WMA files which are not based upon Windows Media® Audio.
 - WMA files copy-protected with DRM.
 - Files which have the data such as WAVE, ATAC3, etc.
- The search function works but search speed is not constant.

Changing the source

- If you change the source, playback also stops (without ejecting the disc).
Next time you select “CD” for the playback source, disc play starts from where it has been stopped previously.

Ejecting a disc

- If the ejected disc is not removed within 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust. (Disc will not play this time.)

General settings—PSM

- If you change the “AMP GAIN” setting from “HIGH PWR” to “LOW PWR” while the volume level is set higher than “VOL 30,” the unit automatically changes the volume level to “VOL 30.”

DAB tuner operations

- Only primary DAB services can be presetted even when you store a secondary service.
- A previously preset DAB service is erased when a new DAB service is stored in the same preset number.

Available characters on the display

This unit can display Roman alphabets, Cyrillic alphabets, numbers, and a limited number of symbols (see below).

- These characters are used to show various information on the display.

А	Б	В	Г	Д	Е	Ж	З	И	Й	К	Л	М
А	Б	В	Г	Д	Е	Ж	З	И	Й	К	Л	М

Н	О	П	Р	С	Т	У	Ф	Х	Ц	Ч	Ш	Щ
Н	О	П	Р	С	Т	У	Ф	Х	Ц	Ч	Ш	Щ

Ъ	Ы	Ь	Э	Ю	Я	Ё	А	В	С	Д	Е	Ф
Ъ	Ы	Ь	Э	Ю	Я	Ё	А	В	С	Д	Е	Ф

G	H	I	J	K	L	M	N	O	P	Q	R	S
G	H	I	J	K	L	M	N	O	P	Q	R	S

T	U	V	W	X	Y	Z	0	1	2	3	4	5
T	U	V	W	X	Y	Z	0	1	2	3	4	5

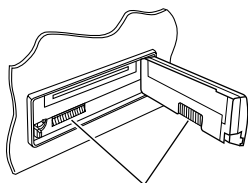
6	7	8	9	-	/	<	>	space
6	7	8	9	-	/	<	>	

Maintenance

How to clean the connectors

Frequent detachment will deteriorate the connectors.

To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.



Connector

Moisture condensation

Moisture may condense on the lens inside the CD player in the following cases:

- After starting the heater in the car.
- If it becomes very humid inside the car.

Should this occur, the CD player may malfunction. In this case, eject the disc and leave the unit turned on for a few hours until the moisture evaporates.

How to handle discs

When removing a disc from its case, press down the center holder of the case and lift the disc out, holding it by the edges.

- Always hold the disc by the edges. Do not touch its recording surface.

When storing a disc into its case, gently insert the disc around the center holder (with the printed surface facing up).

- Make sure to store discs into the cases after use.

Center holder



To keep discs clean

A dirty disc may not play correctly. If a disc does become dirty, wipe it with a soft cloth in a straight line from center to edge.

- Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzene, etc.) to clean discs.



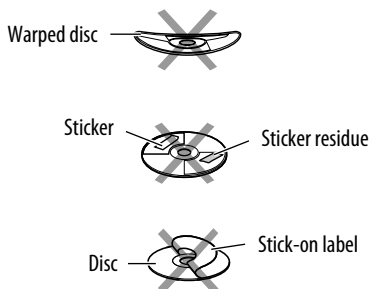
To play new discs

New discs may have some rough spots around the inner and outer edges. If such a disc is used, this unit may reject the disc.

To remove these rough spots, rub the edges with a pencil or ball-point pen, etc.



Do not use the following discs:



Troubleshooting

What appears to be trouble is not always serious. Check the following points before calling a service center.

	Symptoms	Remedies/Causes
General	• Sound cannot be heard from the speakers.	• Adjust the volume to the optimum level. • Check the cords and connections.
	• The unit does not work at all.	Reset the unit (see page 2).
FM/AM	• SSM automatic presetting does not work.	Store stations manually.
	• Static noise while listening to the radio.	Connect the aerial firmly.
Disc playback	• Disc cannot be played back.	Insert the disc correctly.
	• CD-R/CD-RW cannot be played back. • Tracks on the CD-R/CD-RW cannot be skipped.	• Insert a finalized CD-R/CD-RW. • Finalize the CD-R/CD-RW with the component which you used for recording.
	• Disc can be neither played back nor ejected.	• Unlock the disc (see page 12). • Eject the disc forcibly (see page 2).
	• Disc sound is sometimes interrupted.	• Stop playback while driving on rough roads. • Change the disc. • Check the cords and connections.
MP3/WMA playback	• Disc cannot be played back.	• Use a disc with MP3/WMA tracks recorded in the format compliant with ISO 9660 Level 1, Level 2, Romeo, or Joliet. • Add the extension code <.mp3> or <.wma> to the file names.
	• Noise is generated.	Skip to another track or change the disc. (Do not add the extension code <.mp3> or <.wma> to non-MP3 or WMA tracks.)

To be continued...

	Symptoms	Remedies/Causes
MP3/WMA playback	• A longer readout time is required (“CHECK” keeps flashing on the display).	Do not use too many hierarchies and folders.
	• Tracks do not play back in the order you have intended them to play.	Playback order is determined when the files are recorded.
	• Elapsed playing time is not correct.	This sometimes occurs during play. This is caused by how the tracks are recorded on the disc.
	• “NO FILES” appears on the display.	Insert a disc that contains MP3/WMA tracks.
	• Correct characters are not displayed (e.g. album name).	This unit can only display Roman alphabets, Cyrillic alphabets, numbers, and a limited number of symbols (see page 21).
CD changer	• “NO DISC” appears on the display.	Insert a disc into the magazine.
	• “NO MAG” appears on the display.	Insert the magazine.
	• “RESET 8” appears on the display.	Connect this unit and the CD changer correctly and press the reset button of the CD changer.
	• “RESET 1” – “RESET 7” appears on the display.	Press the reset button of the CD changer.
	• The CD changer does not work at all.	Reset the unit (see page 2).
DAB	• “noSIGNAL” appears on the display.	Move to an area with stronger signals.
	• “RESET 8” appears on the display.	Connect this unit and the DAB tuner correctly and reset the unit (see page 2).
	• “ANTENANG” appears on the display.	Check the cords and connections.
	• The DAB tuner does not work at all.	Reconnect this unit and the DAB tuner correctly and reset the unit (see page 2).

- Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

AUDIO AMPLIFIER SECTION

Maximum Power Output:

Front: 50 W per channel

Rear: 50 W per channel

Continuous Power Output (RMS):

Front: 19 W per channel into 4 Ω , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.

Rear: 19 W per channel into 4 Ω , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.

Load Impedance: 4 Ω (4 Ω to 8 Ω allowance)

Tone Control Range:

Bass: ± 10 dB at 100 Hz

Treble: ± 10 dB at 10 kHz

Frequency Response: 40 Hz to 20 000 Hz

Signal-to-Noise Ratio: 70 dB

Line-Out Level/Impedance:

2.5 V/20 k Ω load (full scale)

Output Impedance: 1 k Ω

Other Terminals:

CD changer, AUX (auxiliary) input jack

TUNER SECTION

Frequency Range:

FM1/FM2: 87.5 MHz to 108.0 MHz

FM3: 65.00 MHz to 74.00 MHz

AM: (MW) 522 kHz to 1 620 kHz
(LW) 144 kHz to 279 kHz

[FM Tuner]

Usable Sensitivity: 11.3 dBf (1.0 μ V/75 Ω)

50 dB Quieting Sensitivity:

16.3 dBf (1.8 μ V/75 Ω)

Alternate Channel Selectivity (400 kHz): 65 dB

Frequency Response: 40 Hz to 15 000 Hz

Stereo Separation: 35 dB

Capture Ratio: 1.5 dB

[MW Tuner]

Sensitivity: 20 μ V

Selectivity: 35 dB

[LW Tuner]

Sensitivity: 50 μ V

CD PLAYER SECTION

Type: Compact disc player

Signal Detection System: Non-contact optical pickup (semiconductor laser)

Number of Channels: 2 channels (stereo)

Frequency Response: 5 Hz to 20 000 Hz

Dynamic Range: 96 dB

Signal-to-Noise Ratio: 98 dB

Wow and Flutter: Less than measurable limit

MP3 Decoding Format:

MPEG1/2 Audio Layer 3

Max. Bit Rate: 320 kbps

WMA (Windows Media® Audio) Decoding Format:

Max. Bit Rate: 192 kbps

GENERAL

Power Requirement:

Operating Voltage:

DC 14.4 V (11 V to 16 V allowance)

Grounding System: Negative ground

Allowable Operating Temperature:

0°C to +40°C

Dimensions (W $\times$ H $\times$ D):

Installation Size (approx.):

182 mm $\times$ 52 mm $\times$ 150 mm

Panel Size (approx.):

188 mm $\times$ 58 mm $\times$ 11 mm

Mass (approx.):

1.5 kg (excluding accessories)

Design and specifications are subject to change without notice.

**Having TROUBLE with operation?
Please reset your unit**

Refer to page of How to reset your unit

**Затруднения при эксплуатации?
Пожалуйста, перезагрузите Ваше устройство**
Для получения информации о перезагрузке Вашего устройства
обратитесь на соответствующую страницу

JVC



EN, RU

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0905DTSMDTJEIN

JVC

KD-G527

Installation/Connection Manual

Руководство по установке/подключению

GET0340-002A
[EE]

0905DTSMDTJEIN
EN, RU

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ENGLISH

This unit is designed to operate on **12 V DC, NEGATIVE ground electrical systems**. If your vehicle does not have this system, a voltage inverter is required, which can be purchased at JVC IN-CAR ENTERTAINMENT dealers.

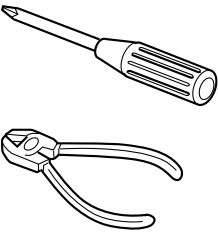
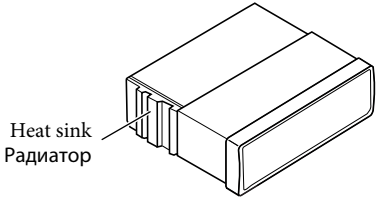
WARNINGS

To prevent short circuits, we recommend that you disconnect the battery’s negative terminal and make all electrical connections before installing the unit.

- **Be sure to ground this unit to the car’s chassis again after installation.**

Notes:

- Replace the fuse with one of the specified rating. If the fuse blows frequently, consult your JVC IN-CAR ENTERTAINMENT dealer.
- It is recommended to connect to the speakers with maximum power of more than 50 W (both at the rear and at the front, with an impedance of **4 Ω to 8 Ω**). If the maximum power is less than 50 W, change “AMP GAIN” setting to prevent the speakers from being damaged (see page 16 of the INSTRUCTIONS).
- To prevent short-circuit, cover the terminals of the UNUSED leads with insulating tape.
- The heat sink becomes very hot after use. Be careful not to touch it when removing this unit.



РУССКИЙ

Это устройство разработано для эксплуатации на **12 В постоянного напряжения с минусом на массе**. Если Ваш автомобиль не имеет этой системы, требуется инвертор напряжения, который может быть приобретен у дилера автомобильного специалиста JVC.

ПРЕДУПРЕЖДЕНИЯ

Для предотвращения коротких замыканий мы рекомендуем Вам отсоединить отрицательный разъем аккумулятора и осуществить все подключения перед установкой устройства.

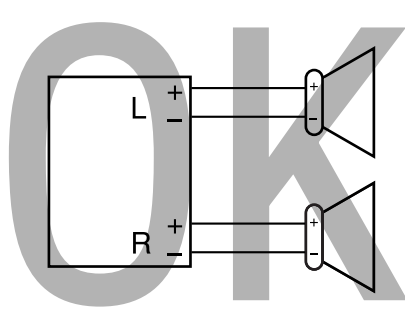
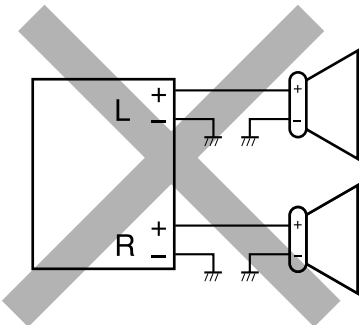
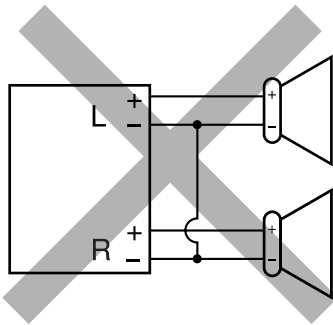
- **После установки обязательно заземлите данное устройство на шасси автомобиля.**

Примечания:

- Заменяйте предохранитель другим предохранителем указанного класса. Если предохранитель сгорает слишком часто, обратитесь к дилеру автомобильного специалиста JVC.
- Рекомендуется подключать динамики с максимальной мощностью более 50 Вт (к задней и передней панели устройства, с полным сопротивлением от **4 Ω до 8 Ω**). Если максимальная мощность динамиков менее 50 Вт, перейдите в режим “AMP GAIN”, чтобы предотвратить их повреждение (см. ИНСТРУКЦИИ ПО ЭКСПЛУАТАЦИИ на стр. 16).
- Для предотвращения короткого замыкания заклейте НЕИСПОЛЬЗУЕМЫЕ концы изолирующей лентой.
- Радиатор во время использования сильно нагревается. Старайтесь его не трогать во время удаления устройства.

PRECAUTIONS on power supply and speaker connections:

- **DO NOT connect the speaker leads of the power cord to the car battery; otherwise, the unit will be seriously damaged.**
- BEFORE connecting the speaker leads of the power cord to the speakers, check the speaker wiring in your car.



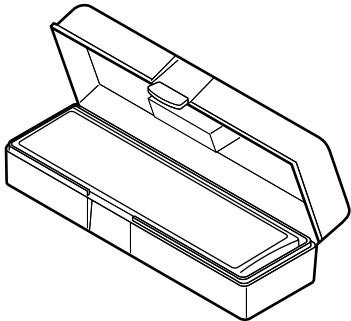
ПРЕДОСТЕРЕЖЕНИЯ по питанию и подключению громкоговорителей:

- **НЕ подключайте провода громкоговорителей к аккумулятору автомобиля, иначе устройство будет повреждено.**
- ПЕРЕД подключением проводов громкоговорителей к кабелю питания громкоговорителя проверьте схему соединений громкоговорителей в Вашем автомобиле.

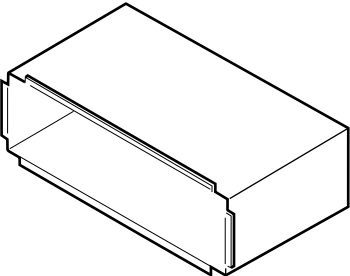
Parts list for installation and connection

The following parts are provided for this unit.
After checking them, please set them correctly.

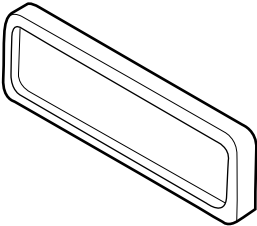
(A) / (B)
Hard case/Control panel
Жесткий футляр/панель управления



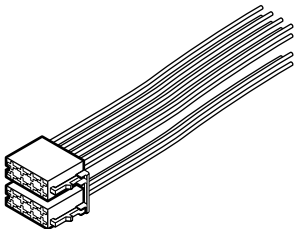
(C)
Sleeve
Муфта



(D)
Trim plate
Декоративную панель



(E)
Power cord
Кабель питания



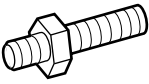
(F)
Washer (ø5)
Шайба (№5)



(G)
Lock nut (M5)
Фиксирующая гайка (M5)



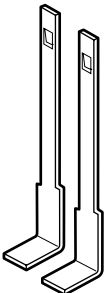
(H)
Mounting bolt (M5 x 20 mm)
Крепежный болт (M5 x 20 мм)



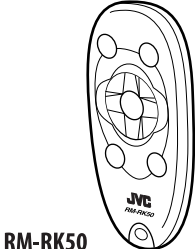
(I)
Rubber cushion
Резиновый чехол



(J)
Handles
Рычаги



(K)
Remote controller
дистанционного управления



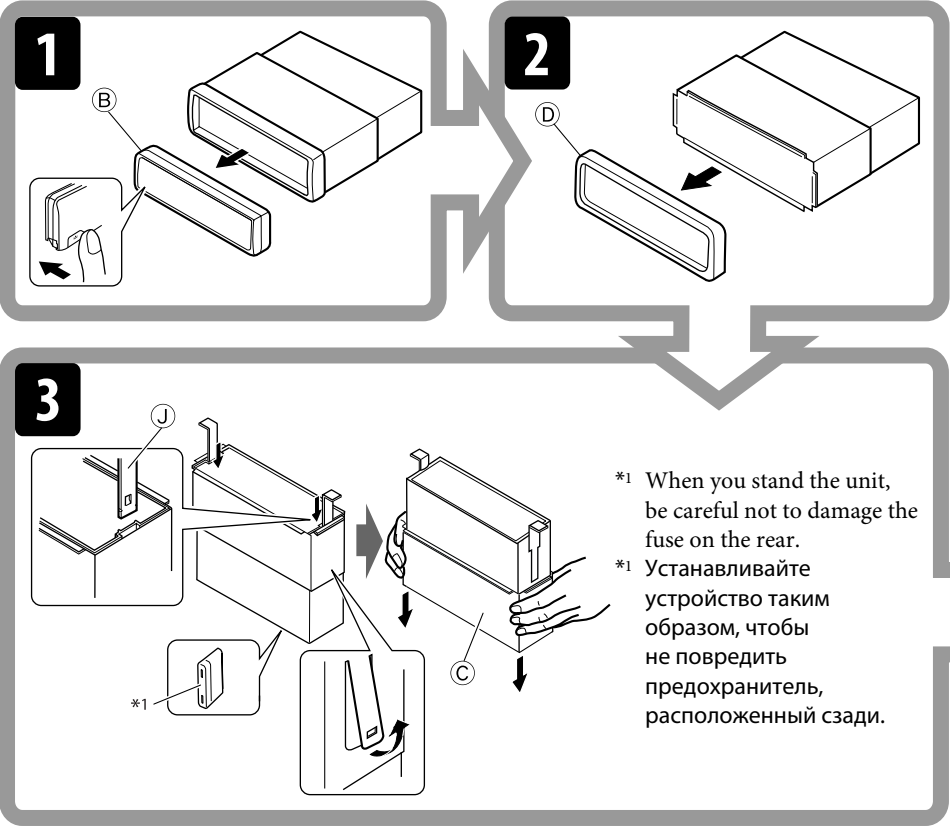
(L)
Battery
Батарейка



INSTALLATION (IN-DASH MOUNTING)

The following illustration shows a typical installation. If you have any questions or require information regarding installation kits, consult your JVC IN-CAR ENTERTAINMENT dealer or a company supplying kits.

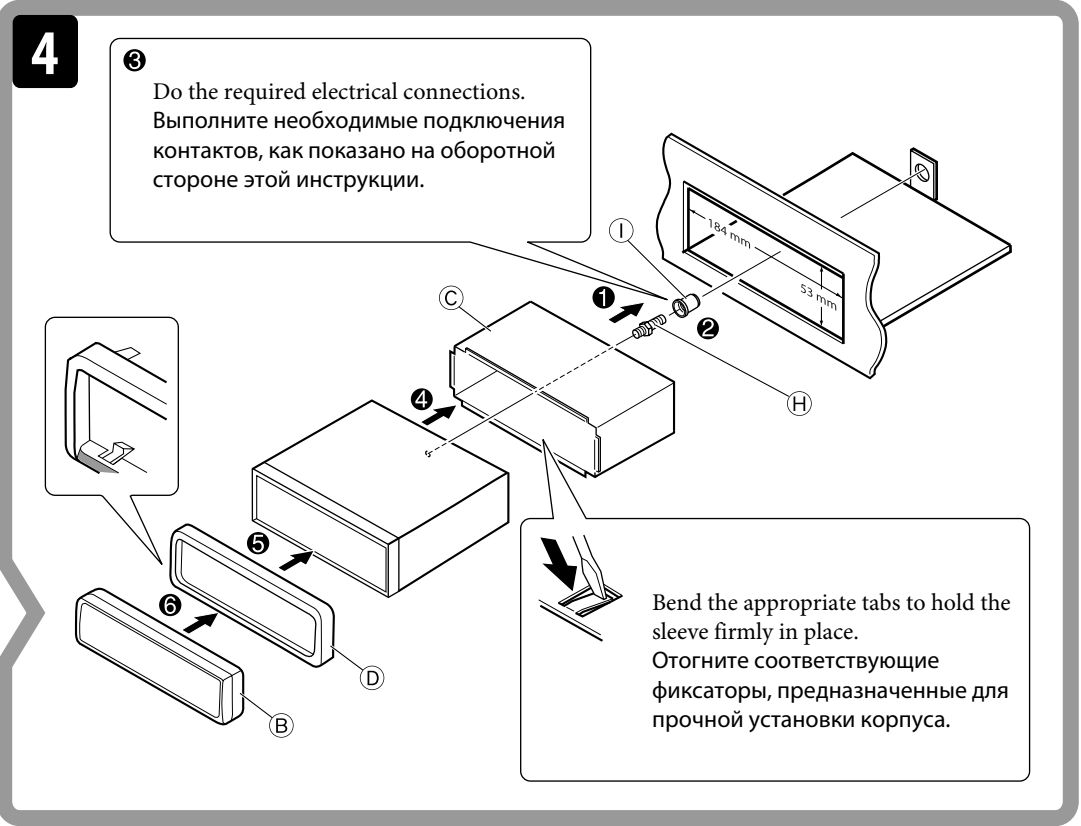
- If you are not sure how to install this unit correctly, have it installed by a qualified technician.



УСТАНОВКА (УСТАНОВКА В ПРИБОРНУЮ ПАНЕЛЬ)

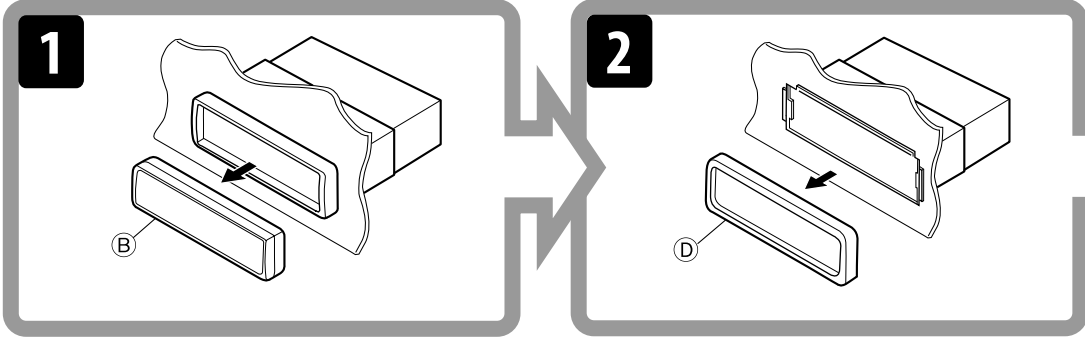
На следующих иллюстрациях показана типовая установка. Если у Вас есть какие-либо вопросы, касающиеся установки, обратитесь к Вашему дилеру автомобильного специалиста JVC или в компанию, поставляющую соответствующие принадлежности.

- Если Вы не знаете точно, как следует устанавливать это устройство, обратитесь к квалифицированному специалисту.



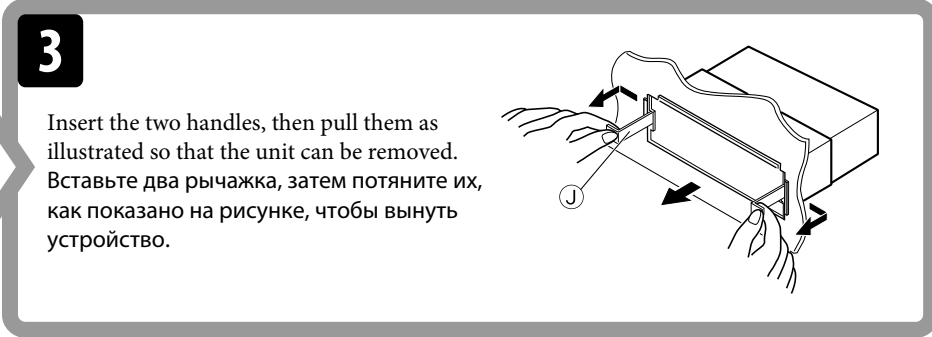
Removing the unit

Before removing the unit, release the rear section.

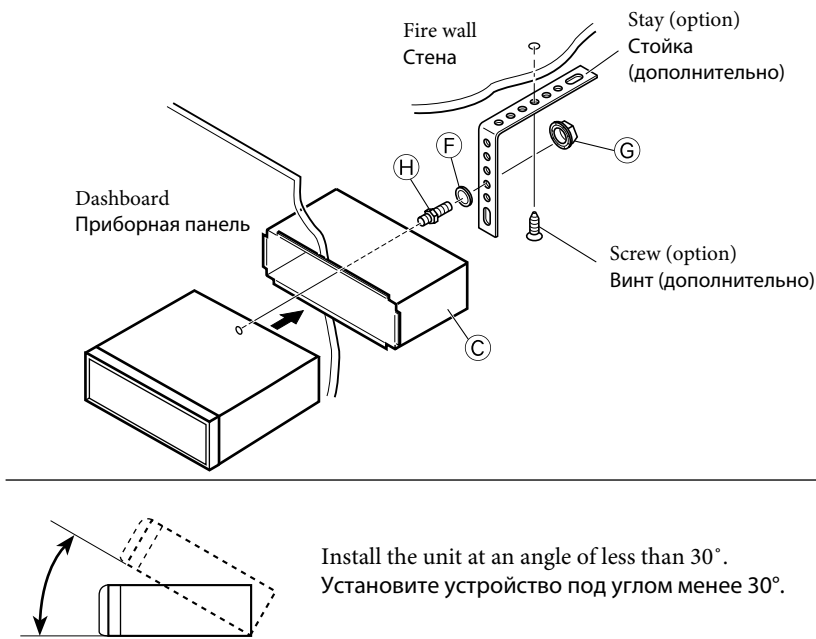


Удаление устройства

Перед удалением устройства освободите заднюю часть.

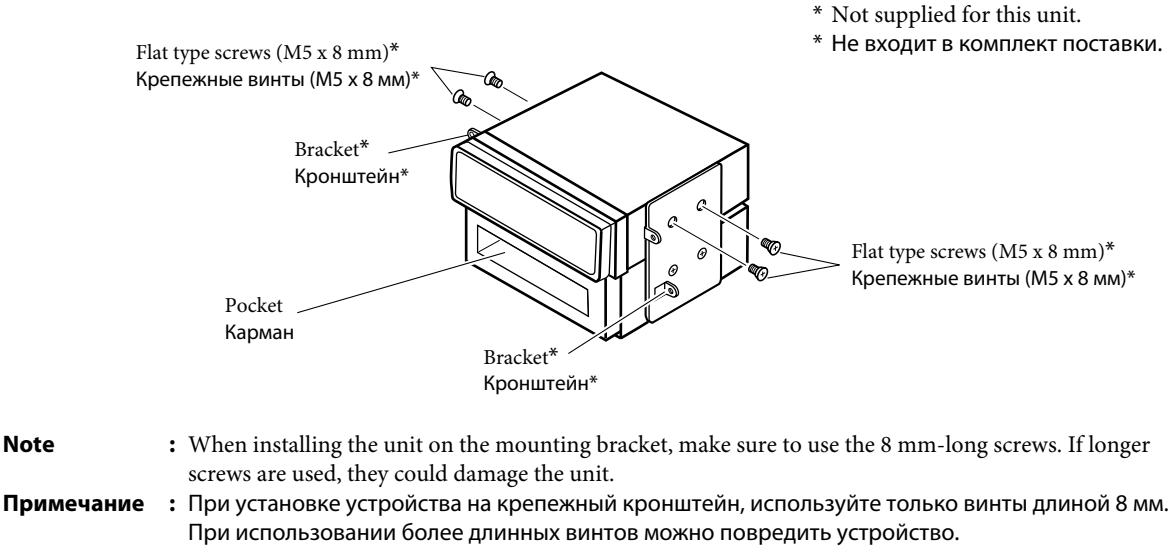


When using the optional stay / При использовании дополнительной стойки



When installing the unit without using the sleeve / При установке устройства без использования муфты

In a Toyota for example, first remove the car radio and install the unit in its place. В автомобилях "Toyota", например, сначала удалите автомобильную магнитолу, затем установите на ее место это устройство.



TROUBLESHOOTING

- **The fuse blows.**
 - * Are the red and black leads connected correctly?
- **Power cannot be turned on.**
 - * Is the yellow lead connected?
- **No sound from the speakers.**
 - * Is the speaker output lead short-circuited?
- **Sound is distorted.**
 - * Is the speaker output lead grounded?
 - * Are the “-” terminals of L and R speakers grounded in common?
- **Noise interfere with sounds.**
 - * Is the rear ground terminal connected to the car’s chassis using shorter and thicker cords?
- **Unit becomes hot.**
 - * Is the speaker output lead grounded?
 - * Are the “-” terminals of L and R speakers grounded in common?
- **This unit does not work at all.**
 - * Have you reset your unit?

ВЫЯВЛЕНИЕ НЕИСПРАВНОСТЕЙ

- **Сработал предохранитель.**
 - * Правильно ли подключены черный и красный провода?
- **Питание не включается.**
 - * Подключен ли желтый провод?
- **Звук не выводится через громкоговорители.**
 - * Нет ли короткого замыкания на кабеле выхода громкоговорителей?
- **Звук искажен.**
 - * Заземлен ли провод выхода громкоговорителей?
 - * Заземлены ли разъемы “-” правого (R) и левого (L) громкоговорителей?
- **Шум мешает звучанию.**
 - * Соединен ли находящийся сзади зажим заземления с шасси автомобиля с помощью более короткого и тонкого шнуров?
- **Устройство нагревается.**
 - * Заземлен ли провод выхода громкоговорителей?
 - * Заземлены ли разъемы “-” правого (R) и левого (L) громкоговорителей?
- **Приемник не работает.**
 - * Выполнена ли перенастройка приемника?

A Typical Connections / Типичные подключения

Before connecting: Check the wiring in the vehicle carefully. Incorrect connection may cause serious damage to this unit.
The leads of the power cord and those of the connector from the car body may be different in color.

- 1 Connect the colored leads of the power cord in the order specified in the illustration below.
- 2 Connect the aerial cord.
- 3 Finally connect the wiring harness to the unit.

Note: If your vehicle does not have any accessory terminal, move the fuse from the fuse position 1 (initial position) to fuse position 2, and connect the red lead (A7) to the positive (+) battery terminal.

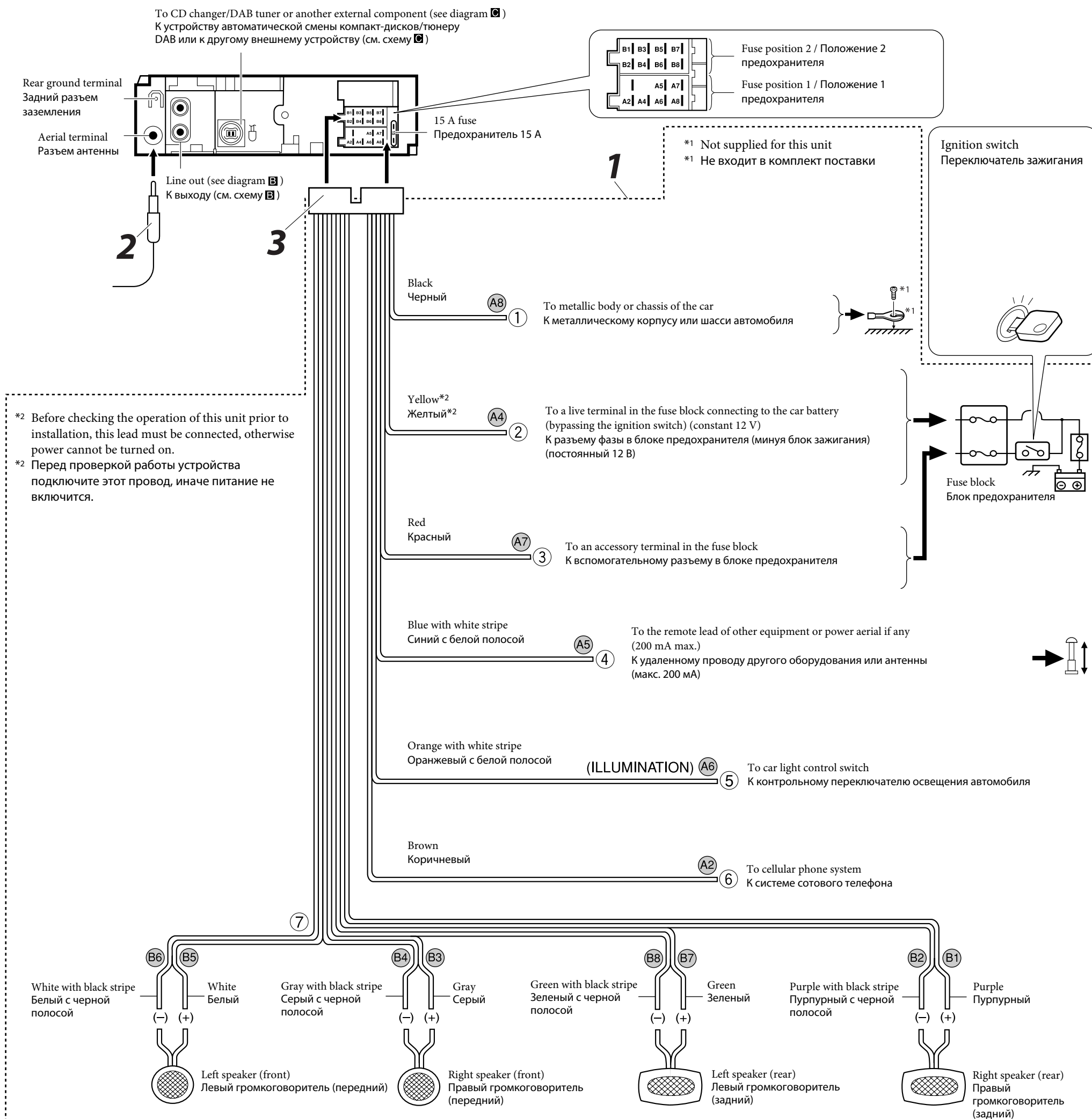
- The yellow lead (A4) is not used in this case.

Перед началом подключений: Тщательно проверьте проводку в автомобиле. Неправильное подключение может привести к серьезному повреждению устройства.
Жилы силового кабеля и жилы соединителя от кузова автомобиля могут быть разного цвета.

- 1 Подсоедините цветные провода шнура питания в указанном ниже порядке.
- 2 Подключите кабель антенны.
- 3 В последнюю очередь подключите электропроводку к устройству.

Примечание: Если в Вашем автомобиле никакого вспомогательного разъема не имеется, переставьте предохранитель из положения 1 предохранителя (первоначальное положение) в положение 2 предохранителя и подключите красный провод (A7) к положительному (+) полюсу аккумулятора.

- Желтый провод (A4) в этом случае не используется.



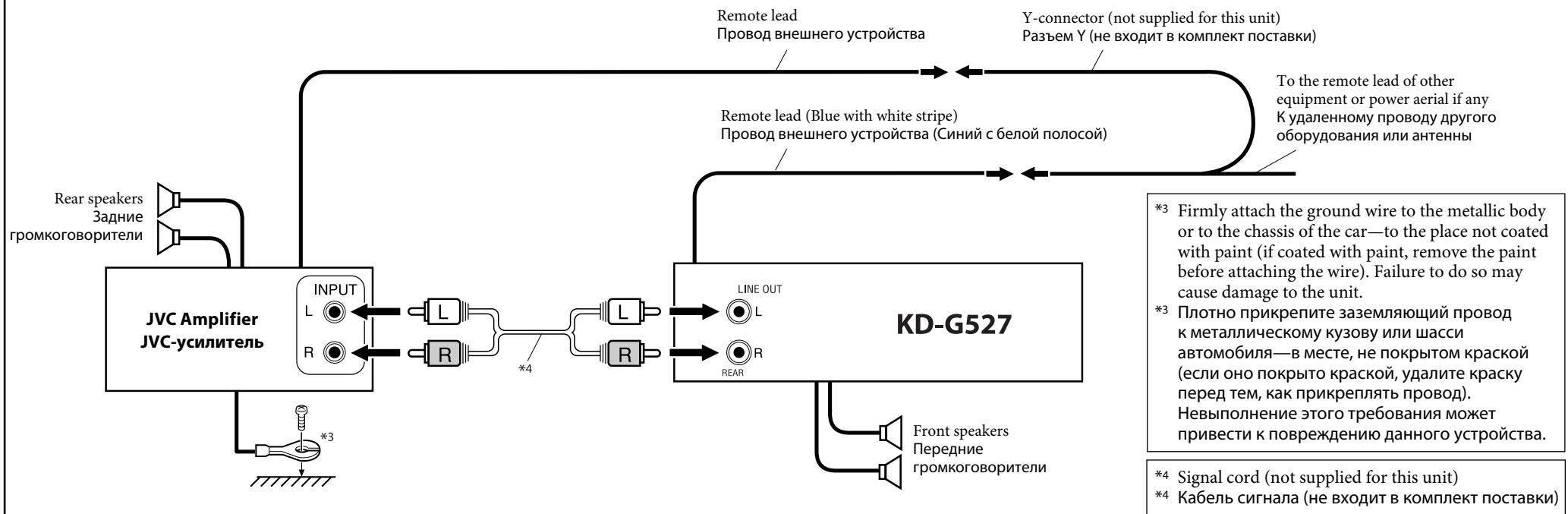
B Connecting the external amplifier / Подключение внешних усилителей

You can connect an amplifier to upgrade your car stereo system.

- Connect the remote lead (blue with white stripe) to the remote lead of the other equipment so that it can be controlled through this unit.
- **Disconnect the speakers from this unit, connect them to the amplifier. Leave the speaker leads of this unit unused.**

Можно подключить усилители для обновления автомобильной стереосистемы.

- Подсоедините провод внешнего устройства (синий с белой полосой) к проводу внешнего устройства другого оборудования так, чтобы им можно было управлять с этого устройства.
- **Отсоедините громкоговорители от данного устройства, подключите их к усилителю. Оставьте провода громкоговорителей данного устройства неиспользованными.**



*3 Firmly attach the ground wire to the metallic body or to the chassis of the car—to the place not coated with paint (if coated with paint, remove the paint before attaching the wire). Failure to do so may cause damage to the unit.

*3 Плотно прикрепите заземляющий провод к металлическому кузову или шасси автомобиля—в месте, не покрытом краской (если оно покрыто краской, удалите краску перед тем, как прикреплять провод). Невыполнение этого требования может привести к повреждению данного устройства.

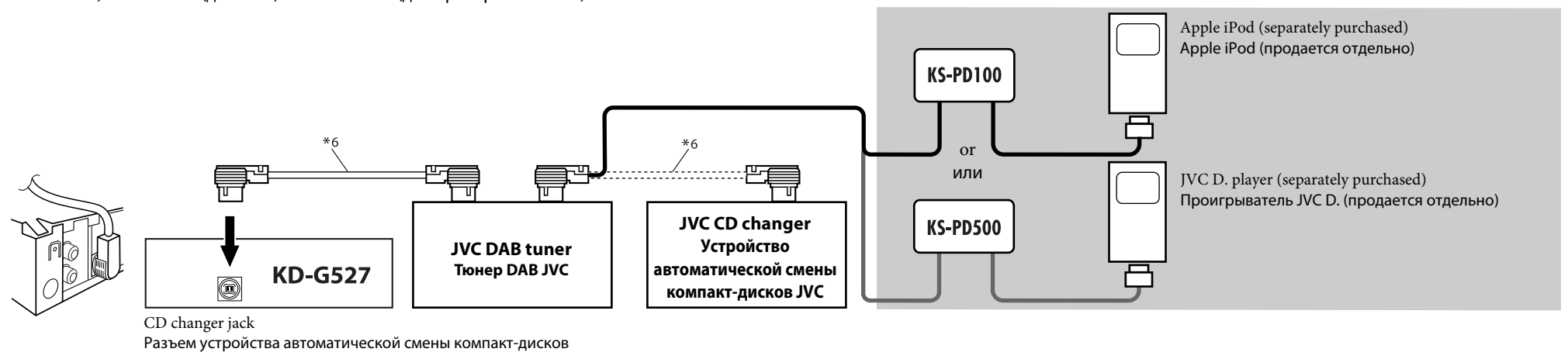
*4 Signal cord (not supplied for this unit)
*4 Кабель сигнала (не входит в комплект поставки)

Connecting the external components / Подключение внешних устройств

- Set “CHANGER” for the external input setting (see page 16 of the INSTRUCTIONS.) / Установите для внешнего входа значение „CHANGER” (см. ИНСТРУКЦИИ ПО ЭКСПЛУАТАЦИИ на стр. 16).

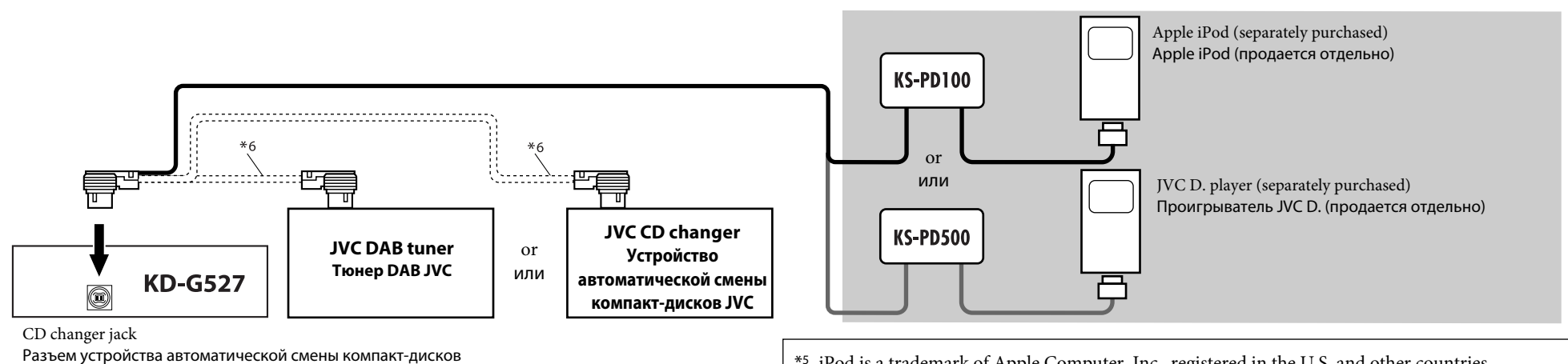
CD changer, DAB tuner, Apple iPod®, or JVC D. player / Устройство автоматической смены компакт-дисков, тюнер DAB, Apple iPod® или проигрыватель JVC D.

- You can connect both components in series as illustrated below. The iPod*5 or D. player can be connected using an interface adapter (not supplied)—KS-PD100 (for iPod) or KS-PD500 (for D. player).
- Эти внешние устройства можно подключать параллельно, как показано на рисунке. Проигрыватель iPod*5 или D. можно подключить с помощью интерфейсного адаптера (не входит в комплект поставки)—KS-PD100 (для iPod) или KS-PD500 (для проигрывателя D.).



Apple iPod (separately purchased)
Apple iPod (продается отдельно)

JVC D. player (separately purchased)
Проигрыватель JVC D. (продается отдельно)



CD changer jack
Разъем устройства автоматической смены компакт-дисков

*5 iPod является торговой маркой Apple Computer, Inc., зарегистрированной в США и других странах.

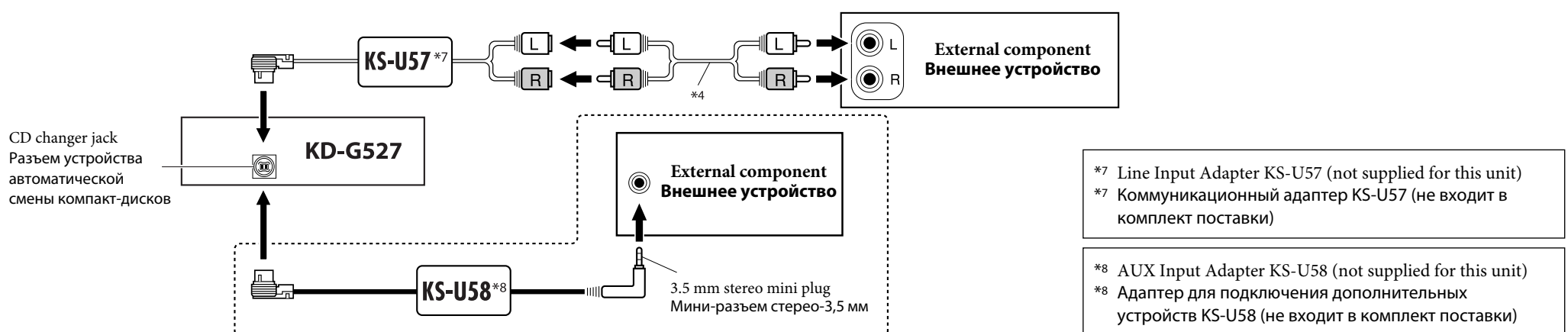
*6 Подключение кабеля, входящего в комплект поставки устройства автоматической смены компакт-дисков или тюнера DAB

CAUTION / ПРЕДОСТЕРЕЖЕНИЕ:

- Before connecting the external components, make sure that the unit is turned off.
- Перед подключением внешних компонентов убедитесь в том, что устройство выключено.

- Set "EXT IN" for the external input setting (see page 16 of the INSTRUCTIONS.) / Установите для внешнего входа значение „EXT IN“ (см. ИНСТРУКЦИИ ПО ЭКСПЛУАТАЦИИ на стр. 16).

External Component / Внешнее устройство



*7 Коммуникационный адаптер KS-U57 (не входит в комплект поставки)

*8 Адаптер для подключения дополнительных устройств KS-U58 (не входит в комплект поставки)

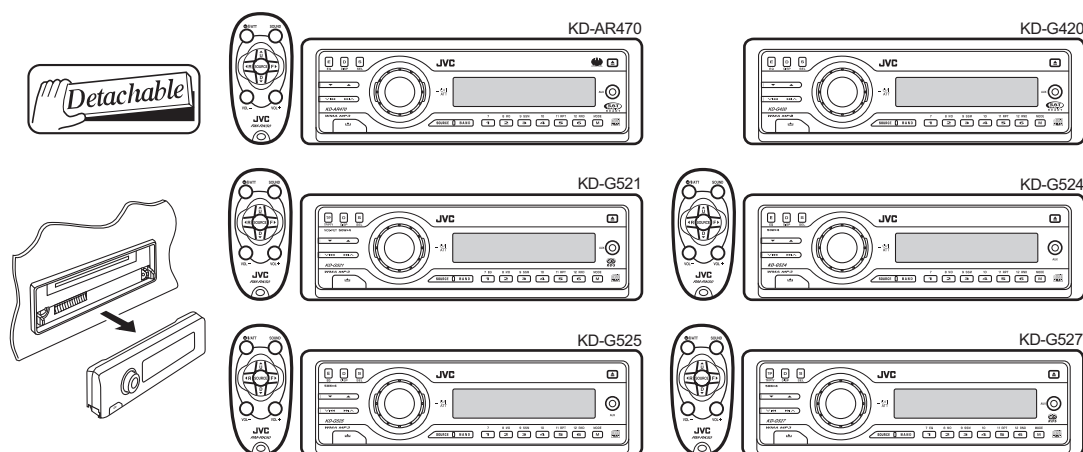
JVC

SCHEMATIC DIAGRAMS

CD RECEIVER

KD-AR470, KD-G420, KD-G521 KD-G524, KD-G525, KD-G527

CD-ROM No.SML200511



KD-AR470, KD-G420

Area suffix

J ----- Northern America

KD-G521

Area suffix

E ----- Southern Europe
EX ----- Northern Europe
EY ----- Eastern Europe
EU ----- Turkey

KD-G524

Area suffix

UI ----- India

KD-G525

Area suffix

UT ----- Taiwan
UH ----- Thailand
UN ----- Indonesia
U ----- Other Areas

KD-G527

Area suffix

EE ----- Russian Federation

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

Contents

Block diagram (For KD-AR470, KD-G420, KD-G524 and KD-G525)	2-1
Standard schematic diagrams (For KD-AR470, KD-G420, KD-G524 and KD-G525)	2-3
Printed circuit boards (For KD-AR470, KD-G420, KD-G524 and KD-G525)	2-9
Block diagram (For KD-G521 and KD-G527)	2-13
Standard schematic diagrams (For KD-G521)	2-15
Standard schematic diagrams (For KD-G527)	2-21
Printed circuit boards (For KD-G521 and KD-G527)	2-27 to 29

Safety precaution

 **CAUTION** Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.

 **CAUTION** Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

Difference point

KD-AR470, KD-G420, KD-G524 and KD-G525

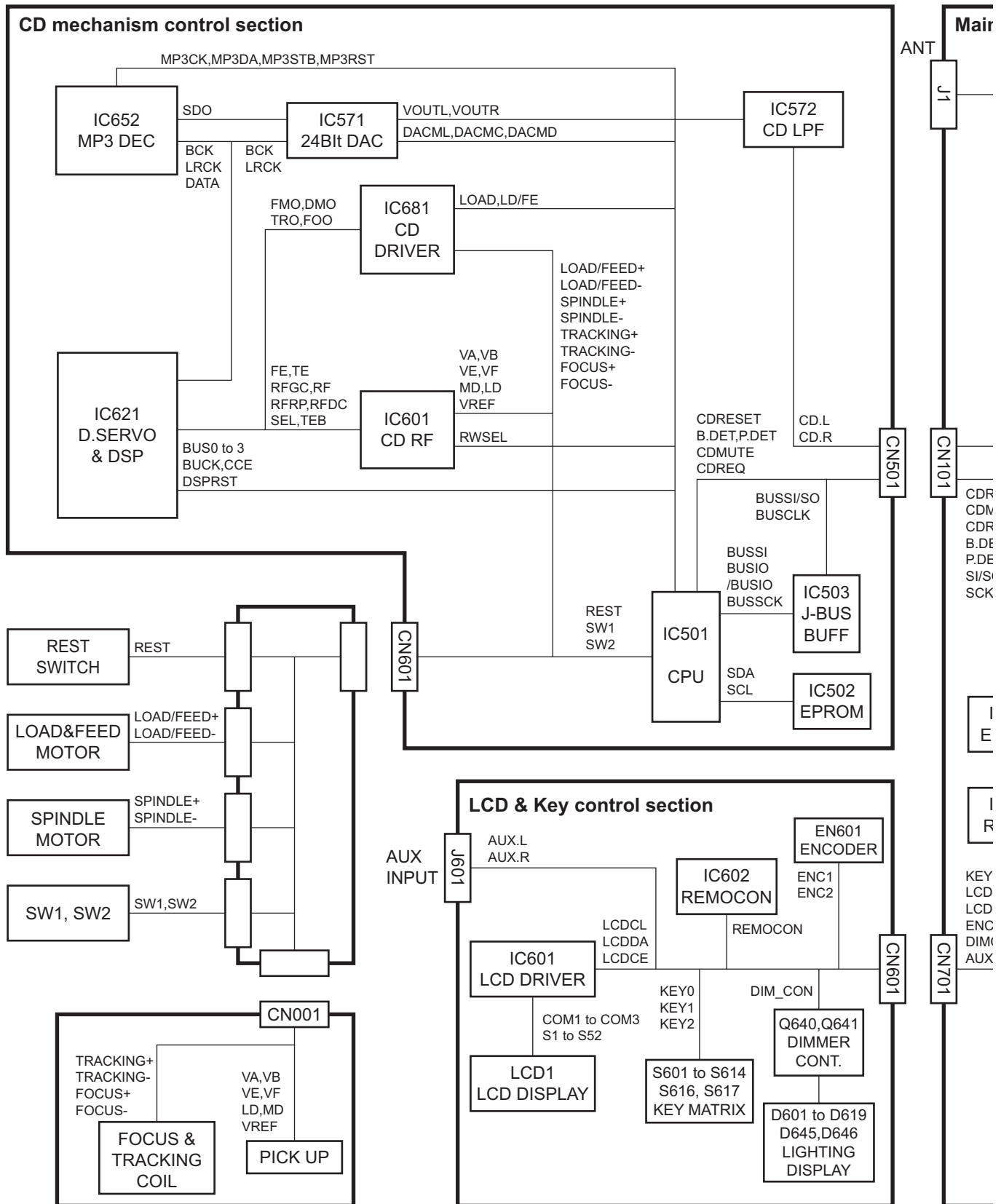
	KD-AR470	KD-G420, KD-G524, KD-G525
Remote controller	YES	NO
Telephone Muting	YES	NO
Line Out Level / Impedance	4.0V / 20k Ω load	2.5V / 20k Ω load

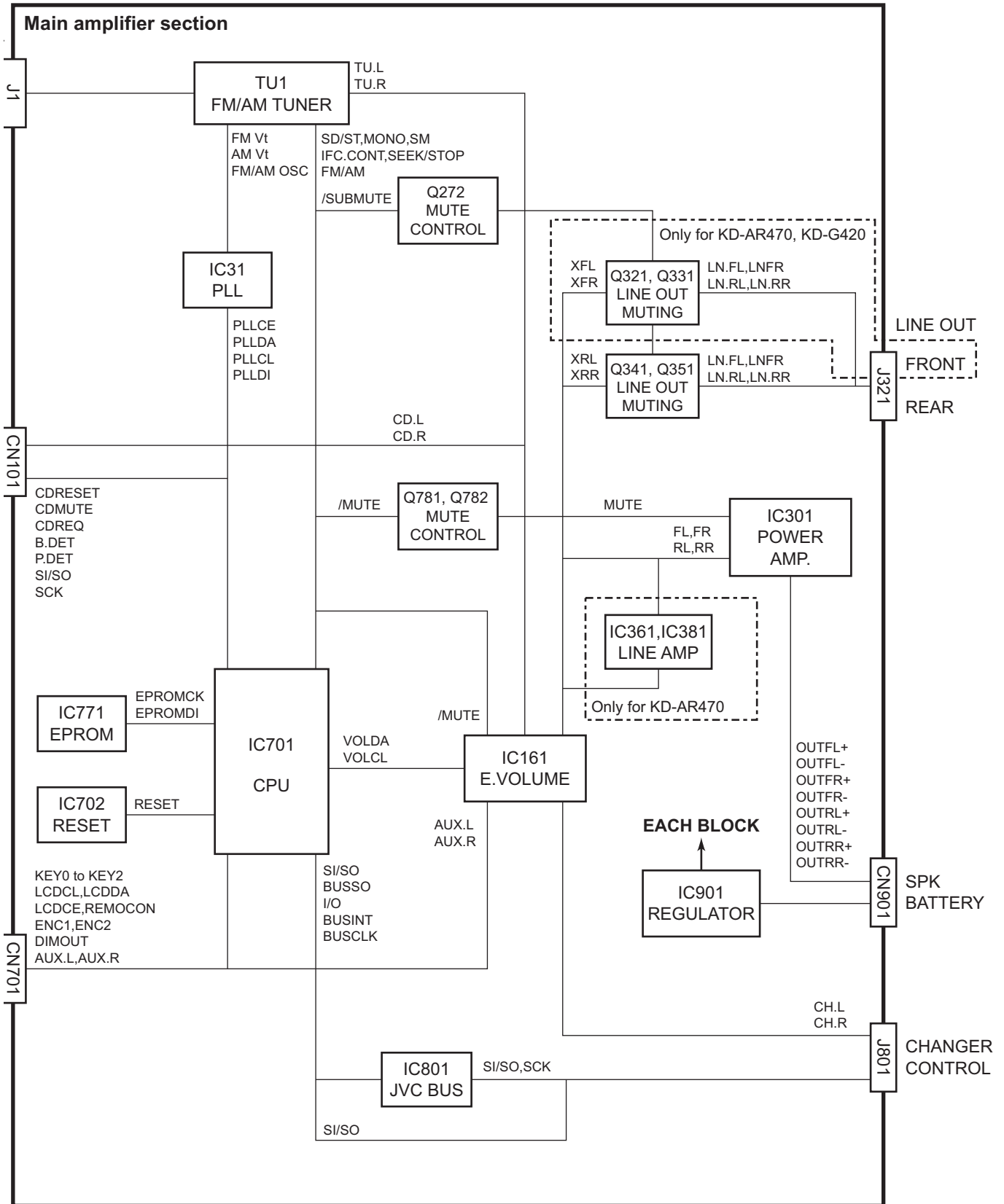
KD-G521, KD-G527

	KD-G521	KD-G527
Steering wheel remote input	YES	NO

< MEMO >

Block diagram (For KD-AR470, KD-G420, KD-G524 and KD-G525)



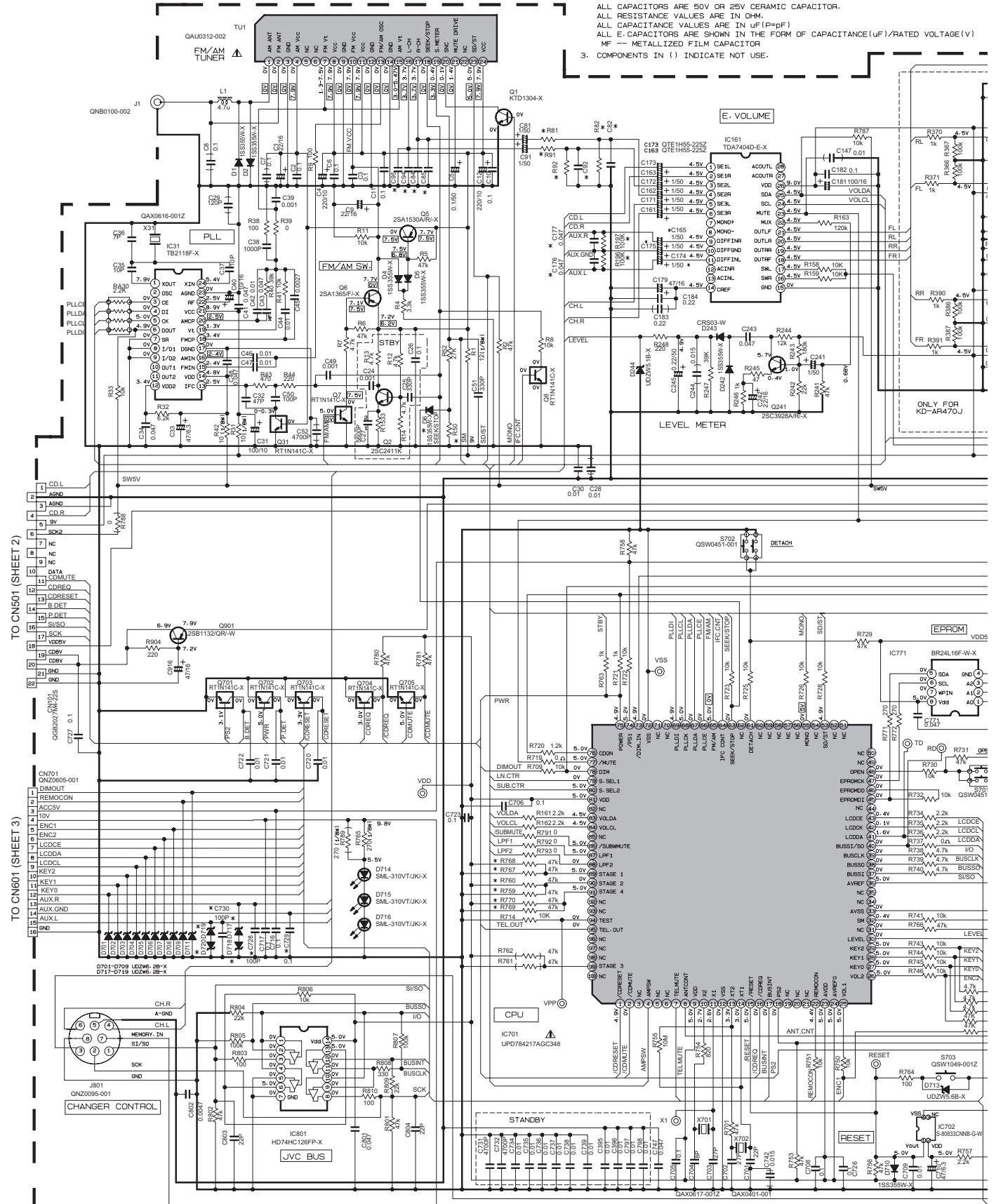


Standard schematic diagrams (For KD-AR470, KD-G420, KD-G524 and KD-G5)

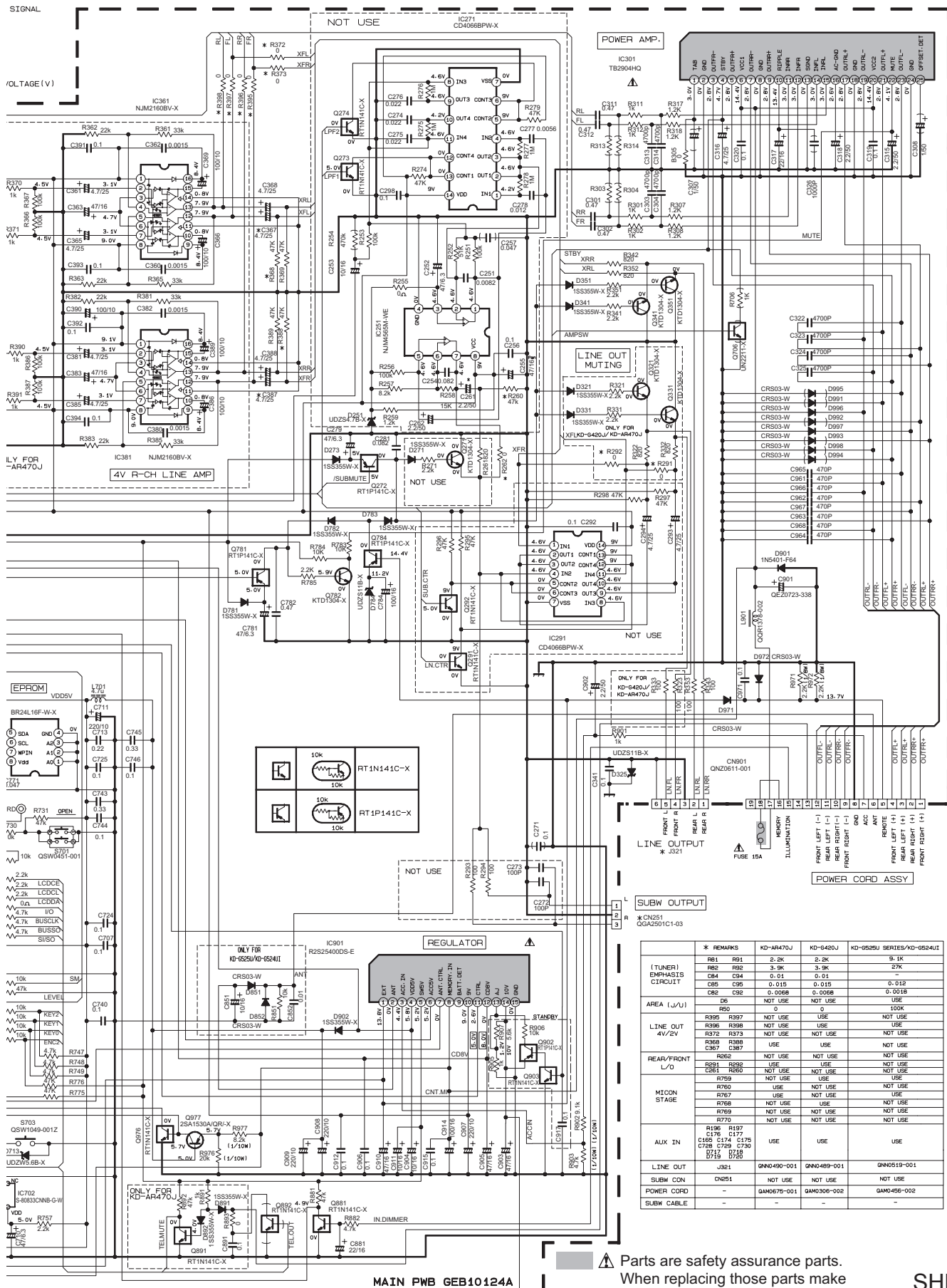
■ Main amplifier section

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION—FM MODE. AM MODE. () CD MODE.
2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/16W 5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM.
ALL CAPACITANCE VALUES ARE IN uF(P=pF)
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)
MF — METALLIZED FILM CAPACITOR
3. COMPONENTS IN () INDICATE NOT USE.



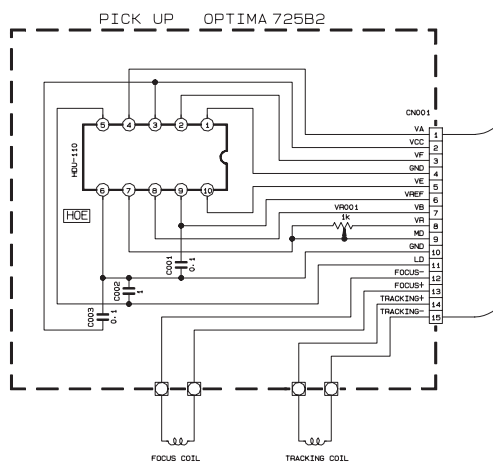
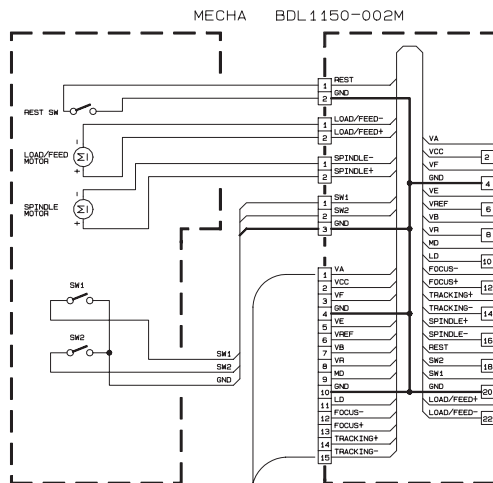
(D-G525)



Parts are safety assurance parts.
When replacing those parts make
sure to use the specified one.

SHEET 1

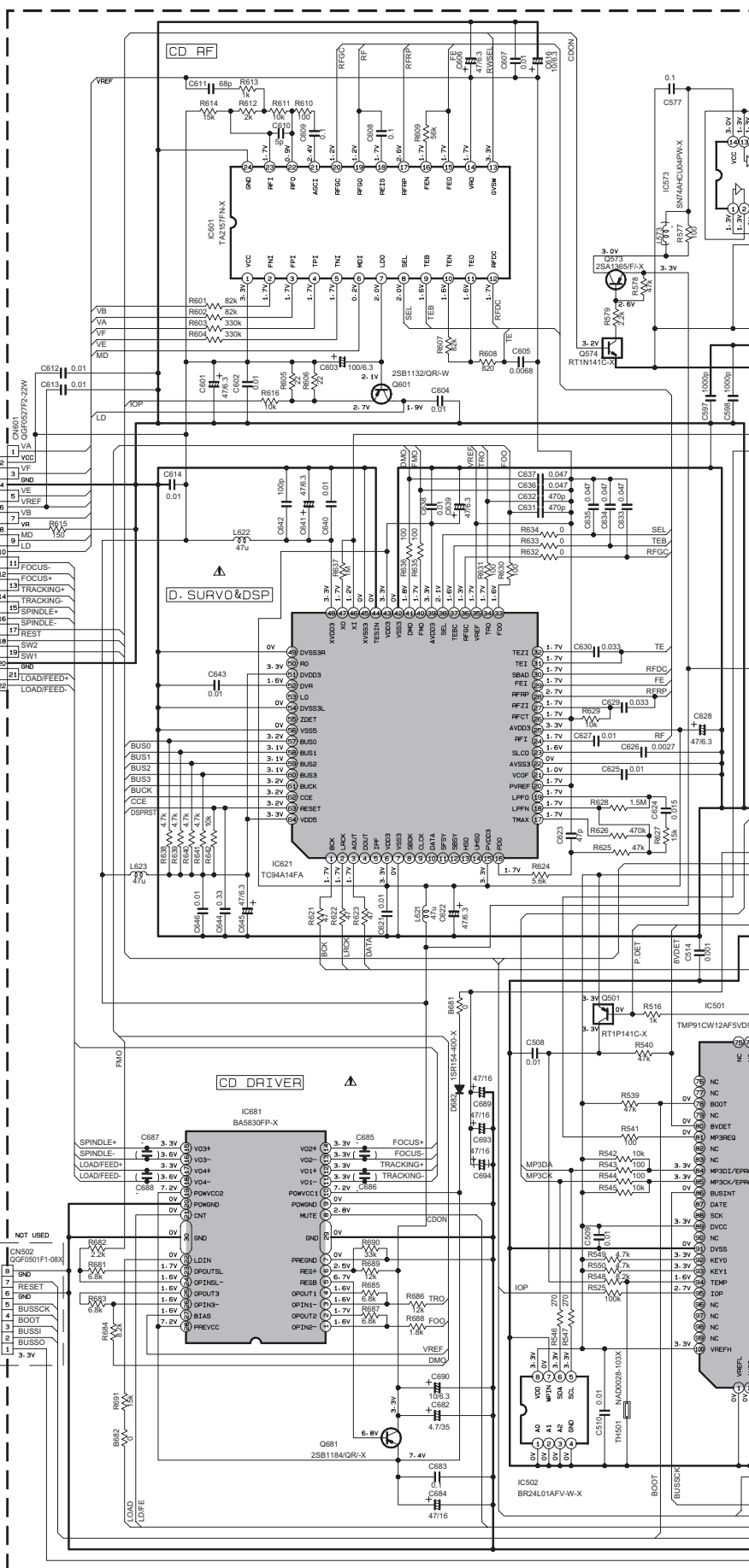
■ CD mechanism control section

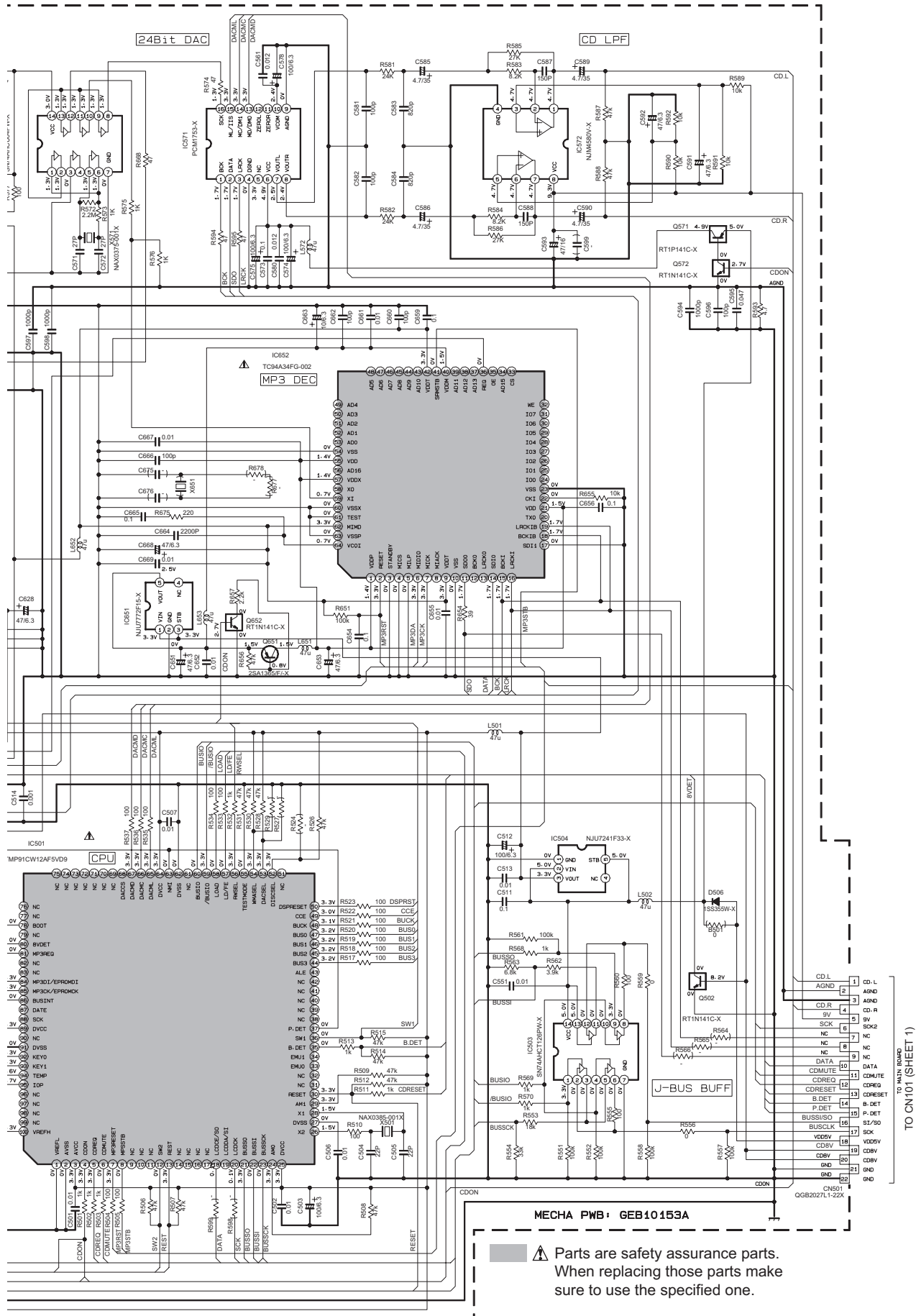


	10K	RT1N141C-X
	10K	RT1P141C-X

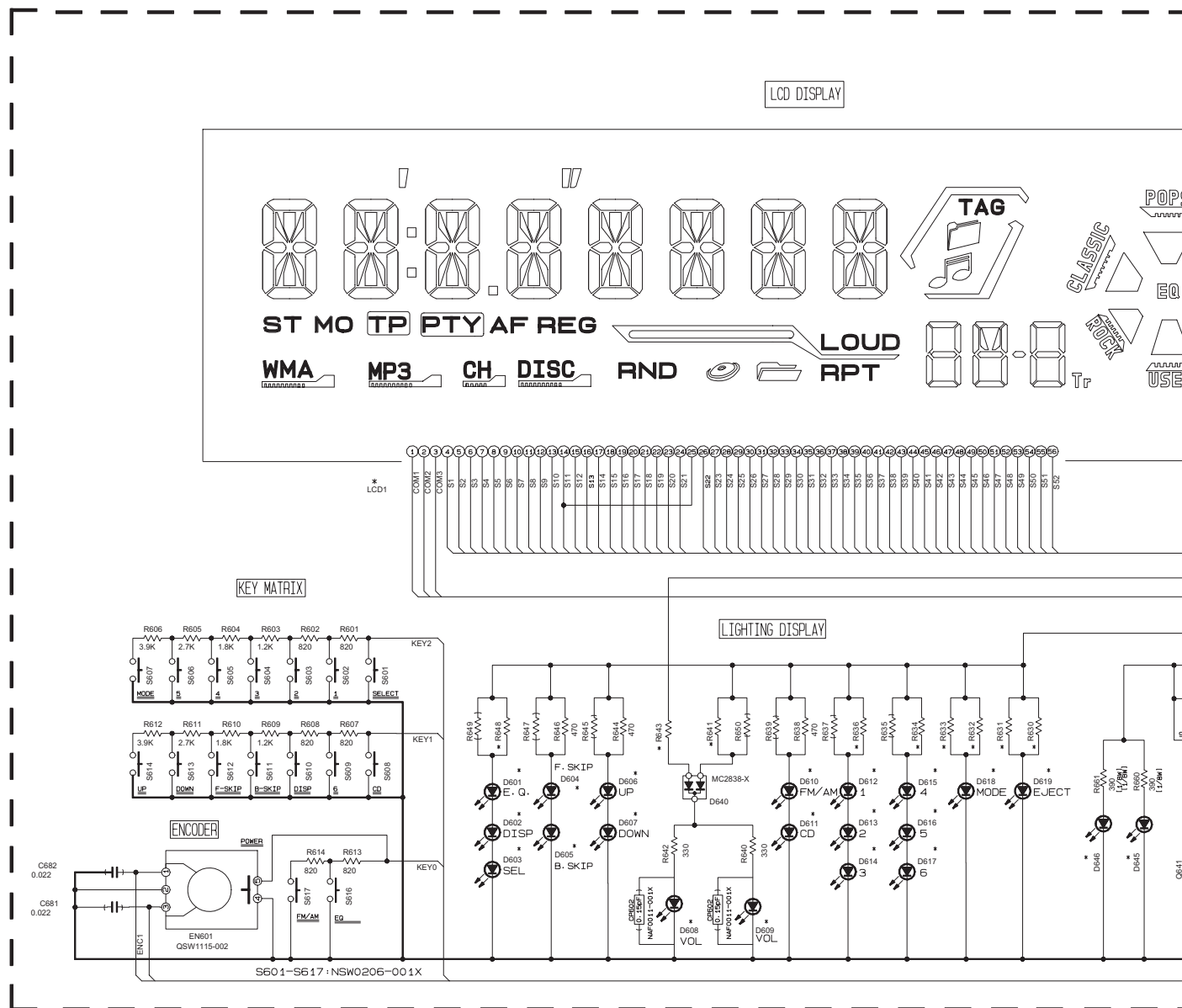
NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
CONDITION — CD MODE.
- UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/16W OR 1/10W OR 1/8W ±5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE 50V OR 25V OR 16V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
ALL RESISTANCE VALUES ARE IN Ω (M).
ALL CAPACITANCE VALUES ARE IN μ F (P=PF).
- ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μ F)/RATED VOLTAGE (V).
- COMPONENTS IN () INDICATE NOT USE.



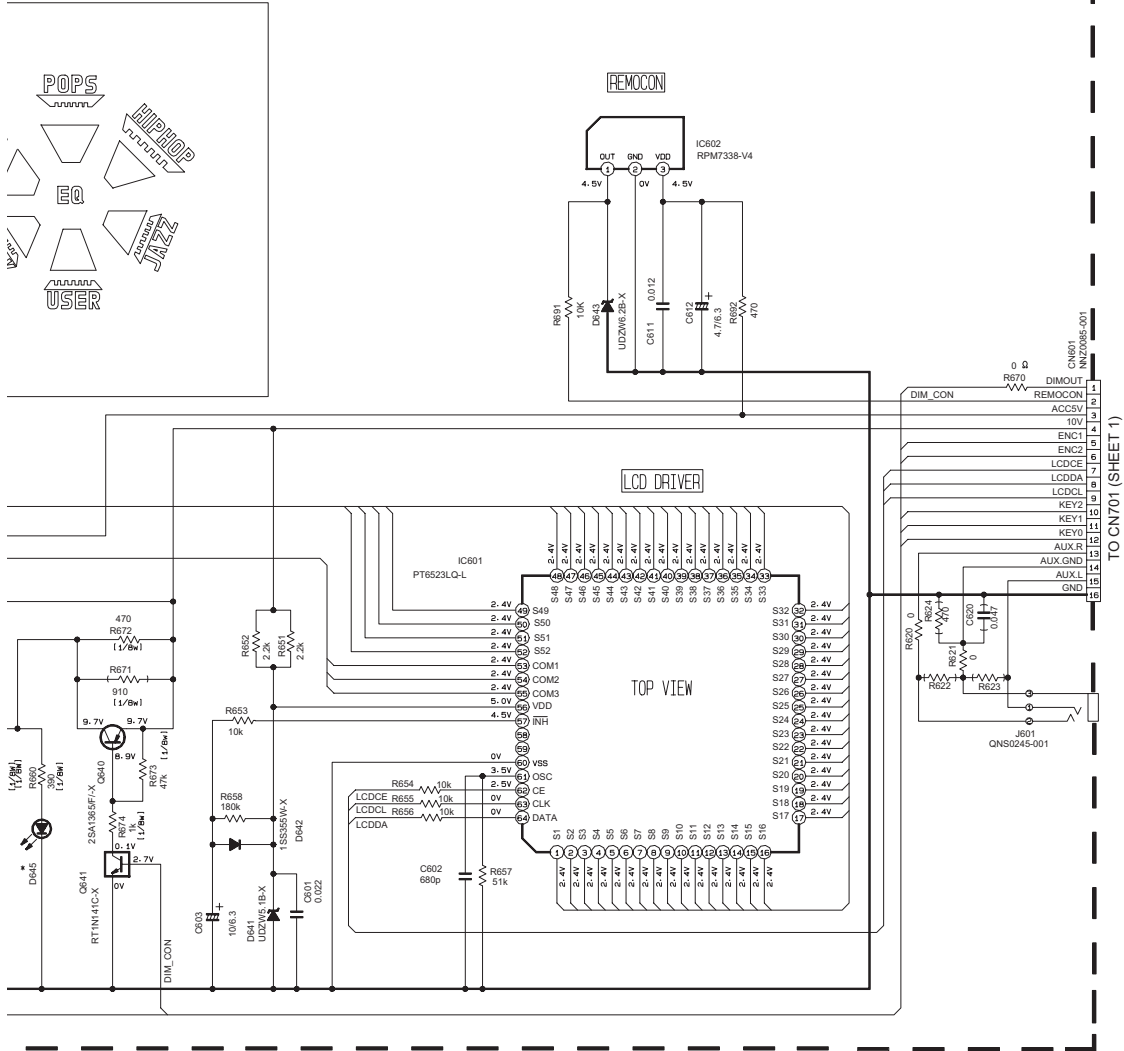


■ LCD & Key control section



* REMARKS	KD-AR470J	KD-G420J	KD-G525U SERIES/ KD-G524UI
D610-D619 D601-D607	SML-310VT/JK/-X	SML-310VT/JK/-X	SML-310VT/JK/-X
D608-D609	SML-310VT/JK/-X	SML-310VT/JK/-X	SML-310VT/JK/-X
R630	1.2K	1K	1K
R631	1.2K	-	-
R632	1.2K	820	820
R633	1.2K	-	-
R634 R636 R648	270	330	330
R641	390	200	200
R643	390	390	200
LCD1	QLD0397-001	QLD0397-001	QLD0385-001
D645-D646	NSPW310BS/B2RST	NSPW310BS/B2RST	NSPW310BS/BRST

SW PWB:GEB10185A



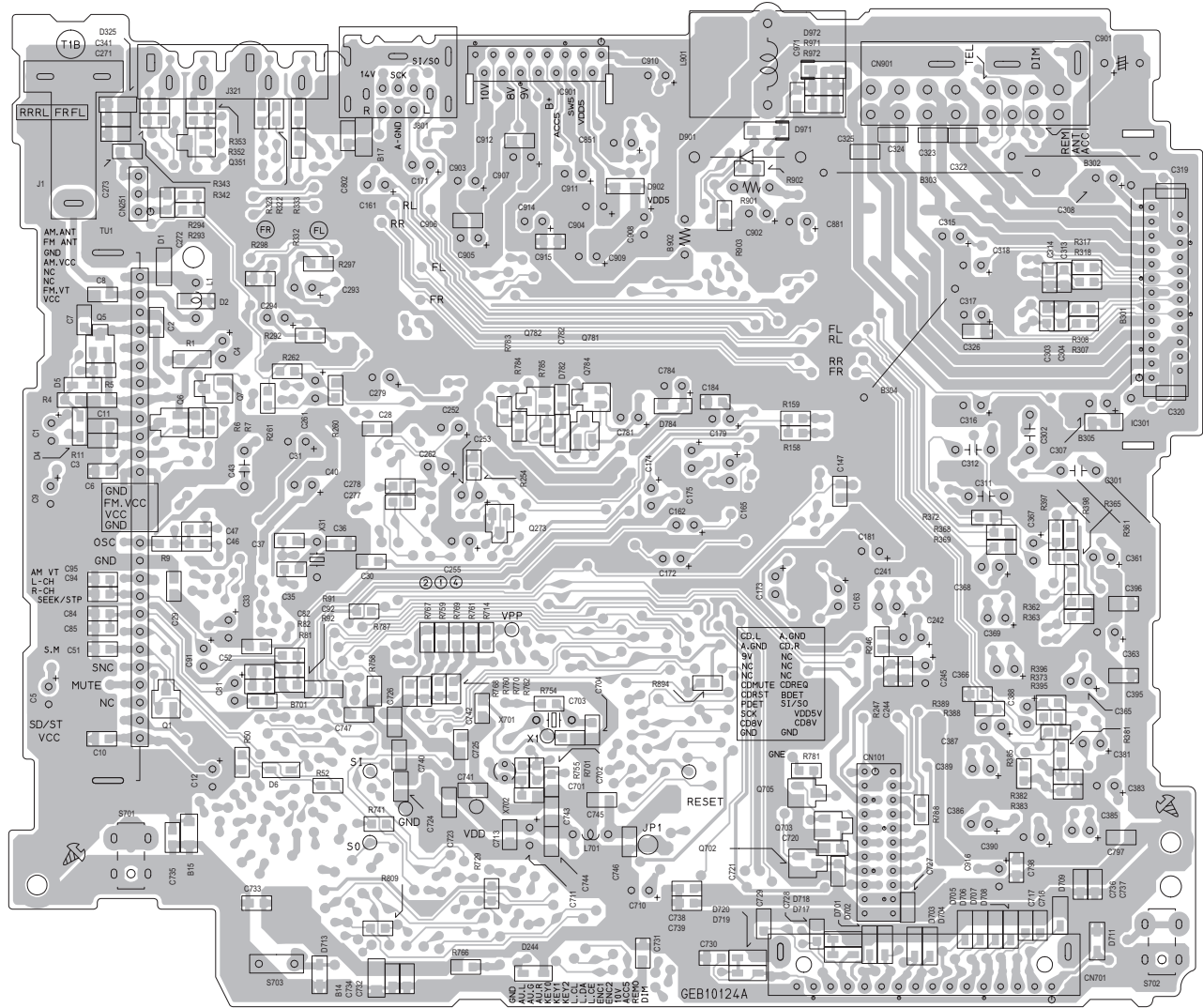
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/16W METAL GLAZE RESISTORS.
ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM.
ALL CAPACITANCE VALUES ARE IN uF(P=pF)
ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)
T — TANTALUM CAPACITOR.
3. COMPONENTS IN () INDICATE NOT USE.

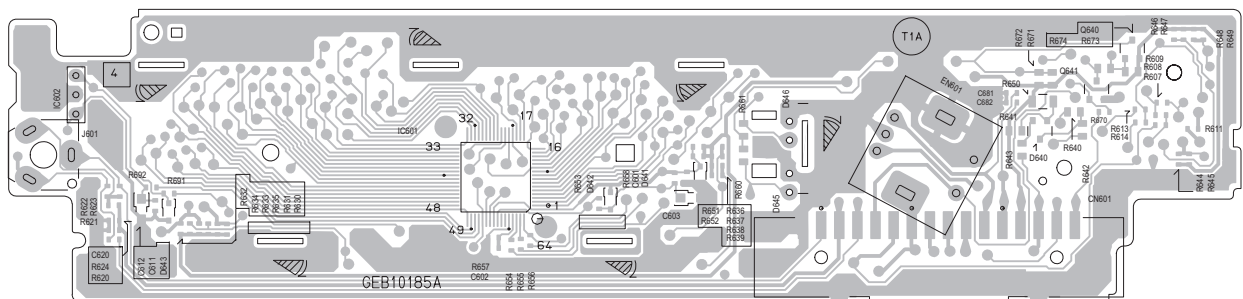
		RT1N141C-X
		RT1P141C-X

■ Main board	Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)
----------------------------	---

Reverse side



Reverse side



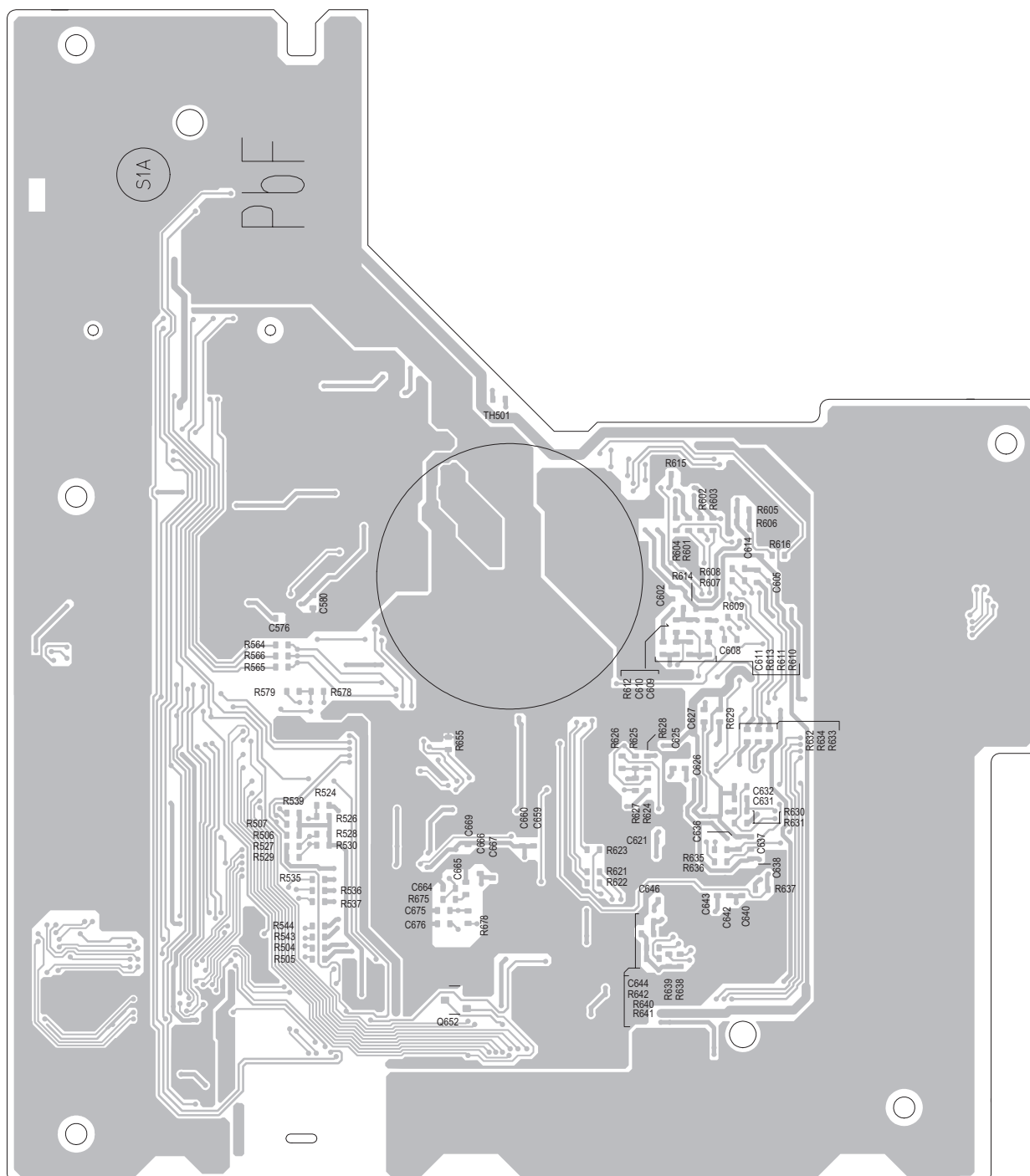
■ **CD mechanism control board**

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

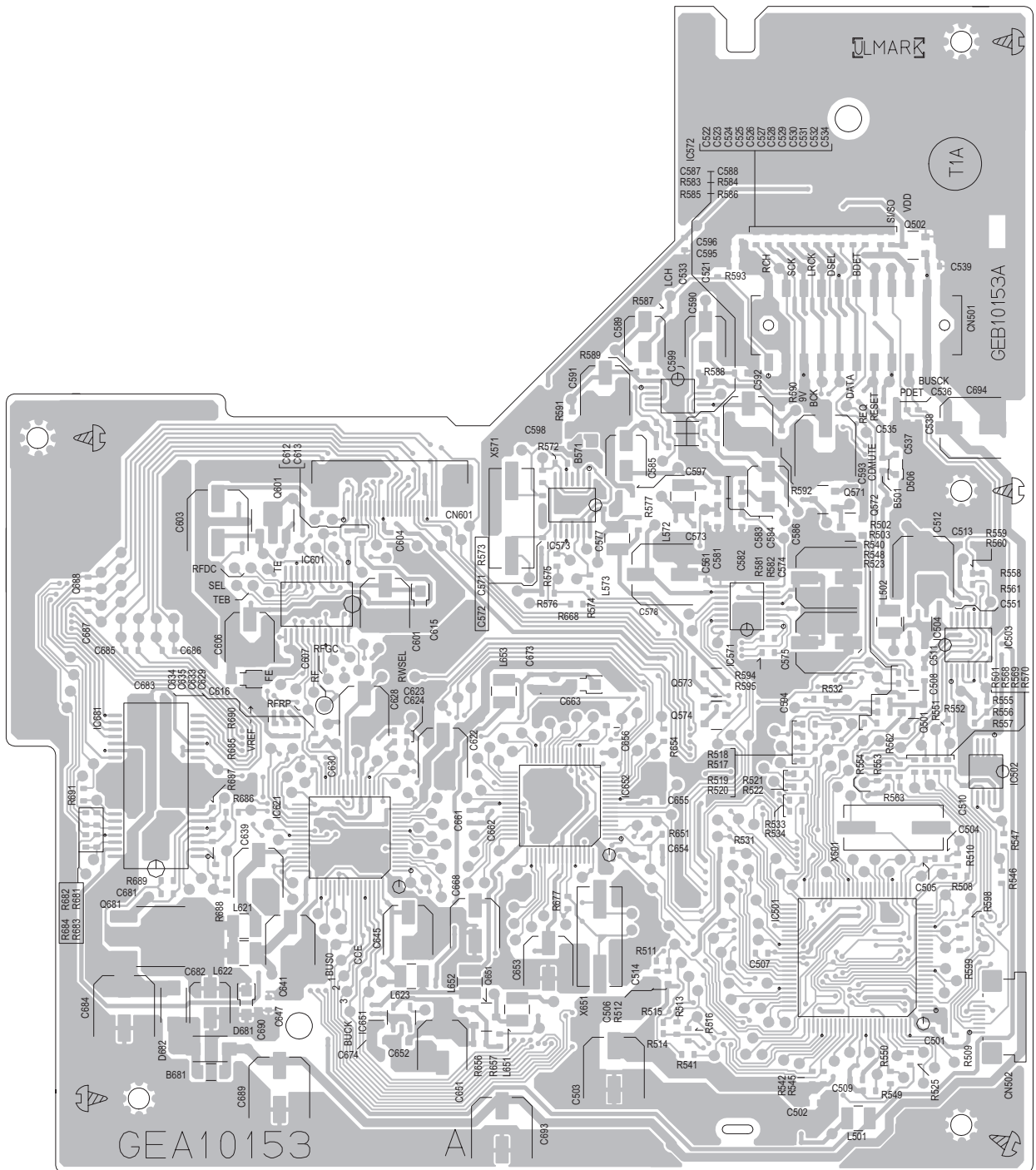
■ **CD mechanism control board**

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

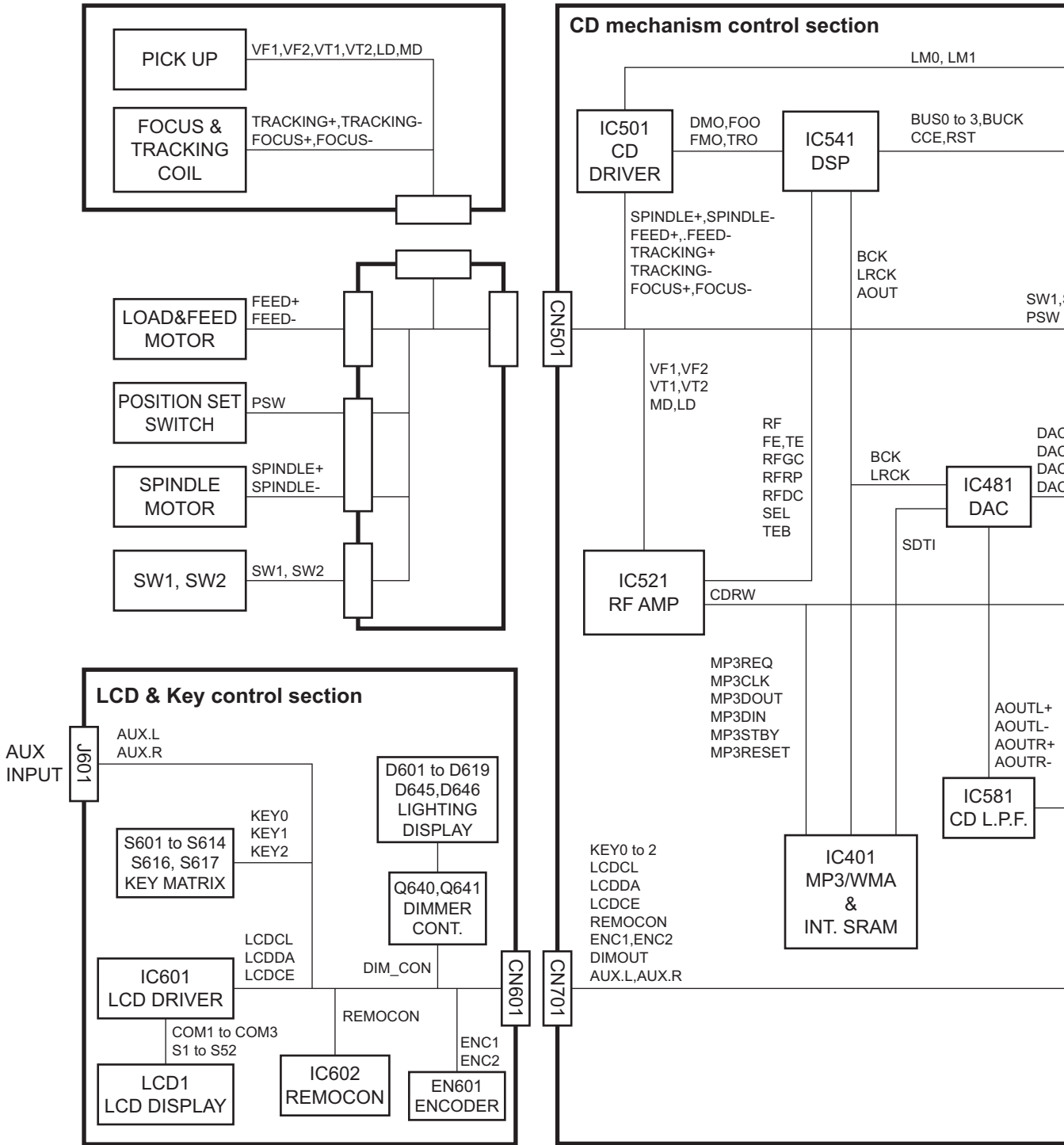
Forward side

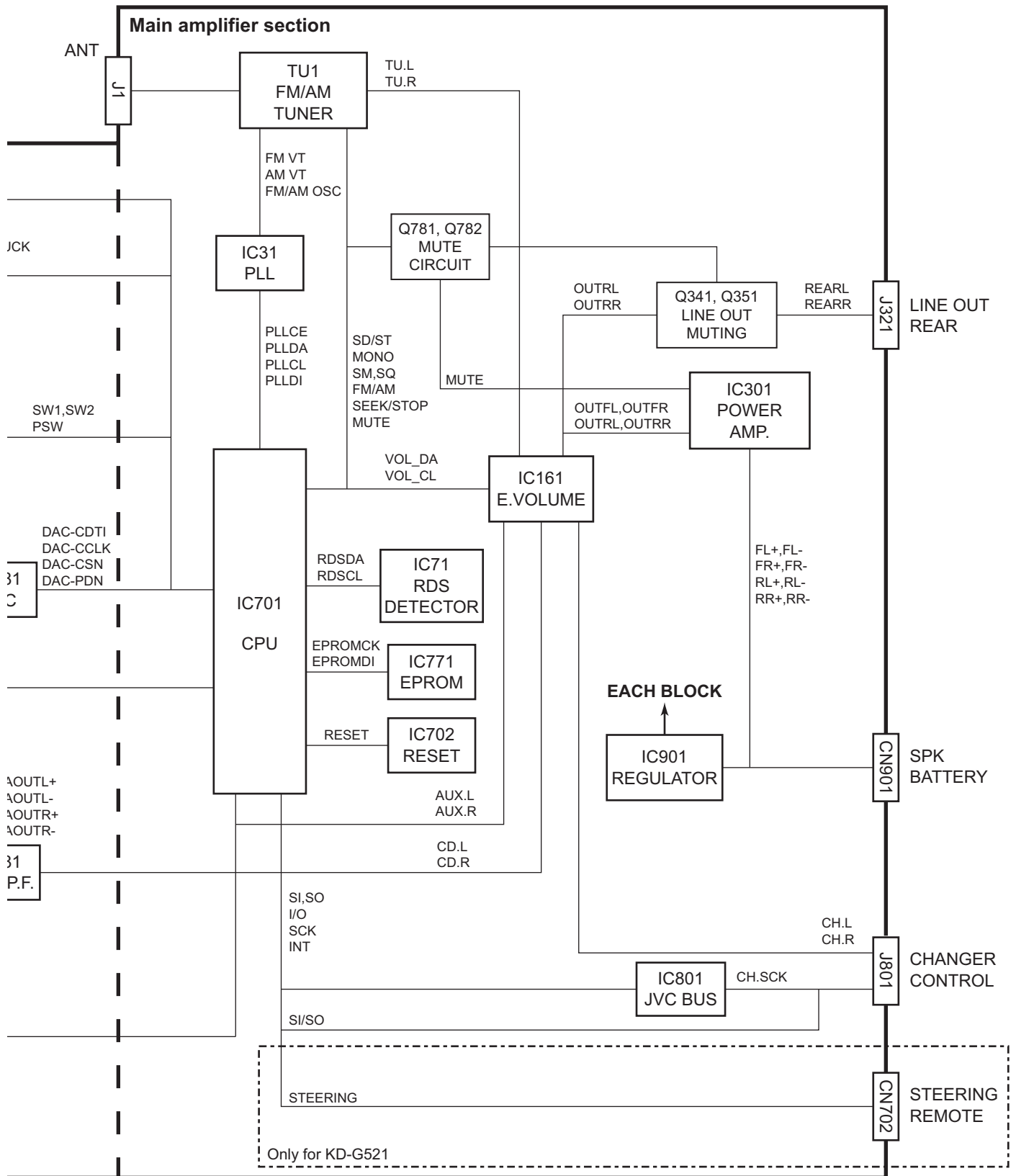


Reverse side



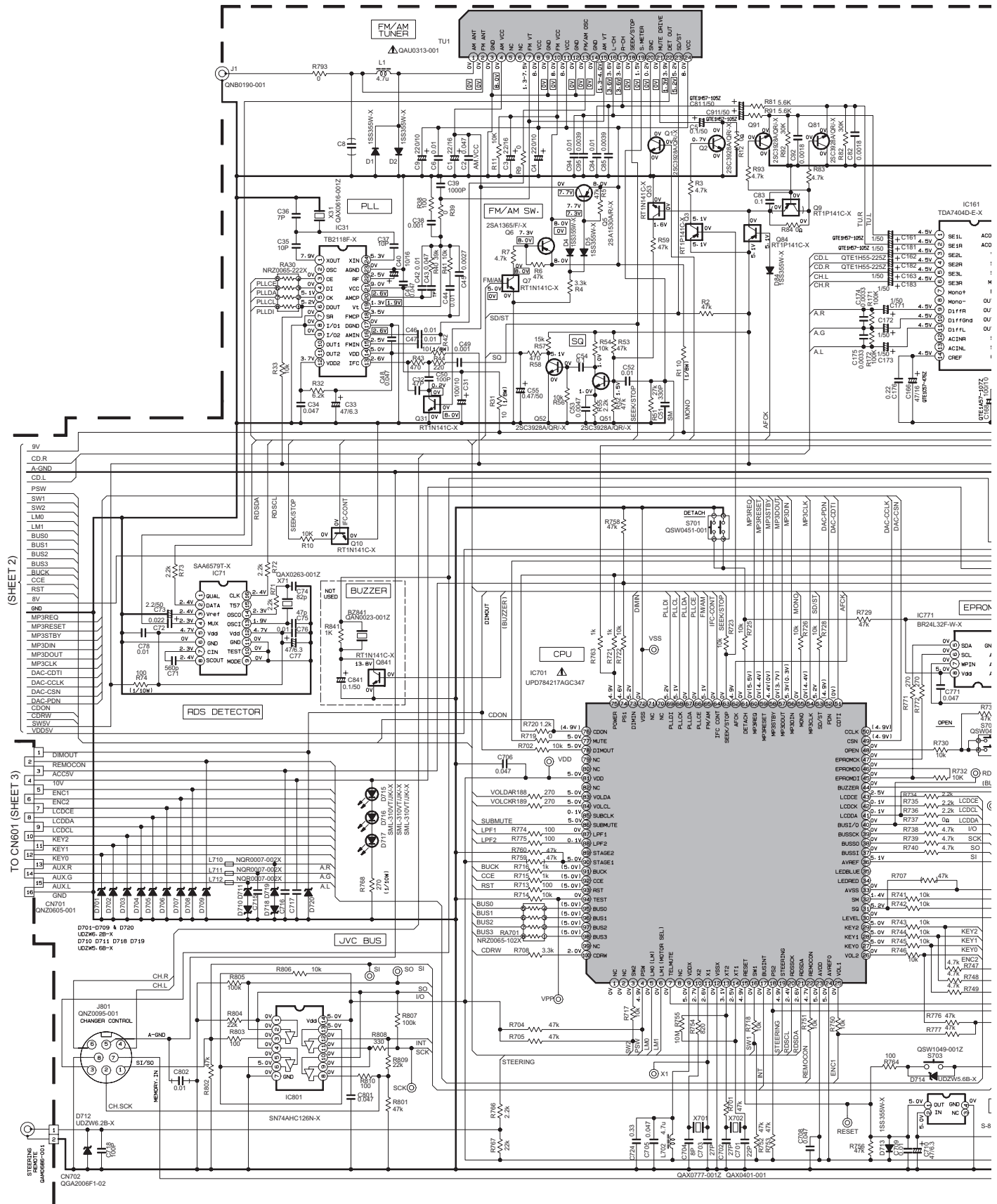
Block diagram (For KD-G521 and KD-G527)



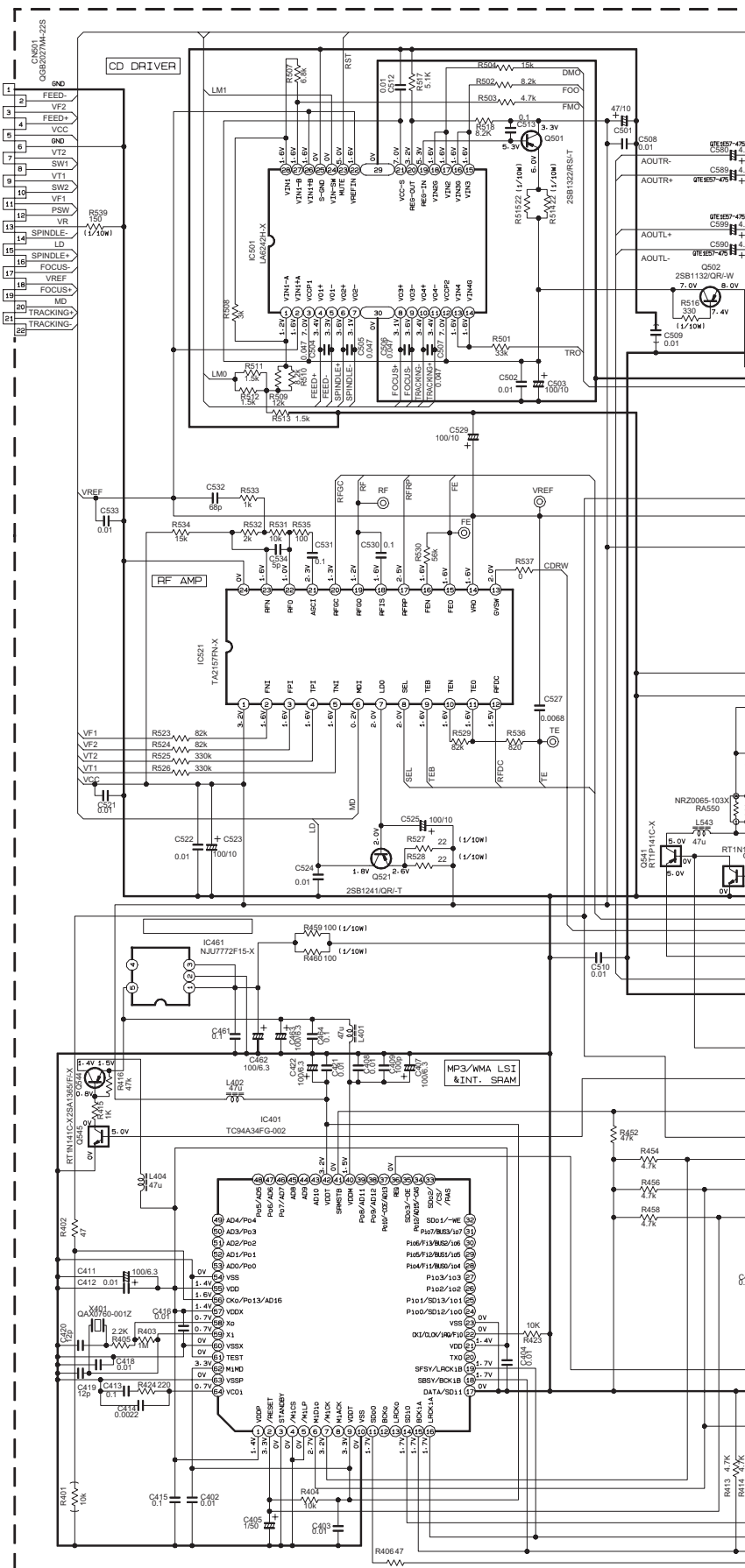
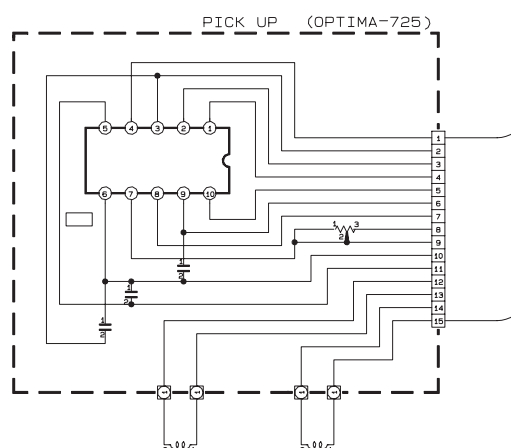
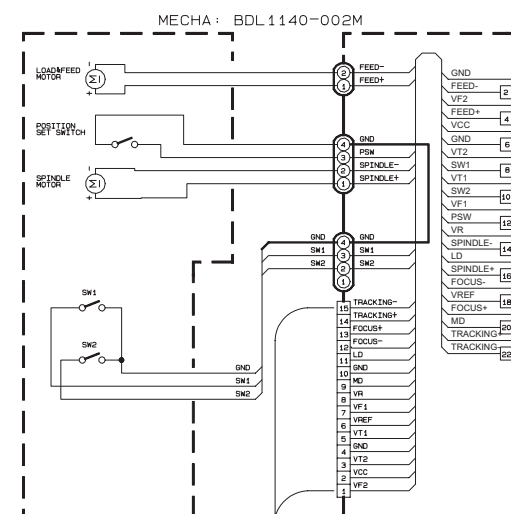


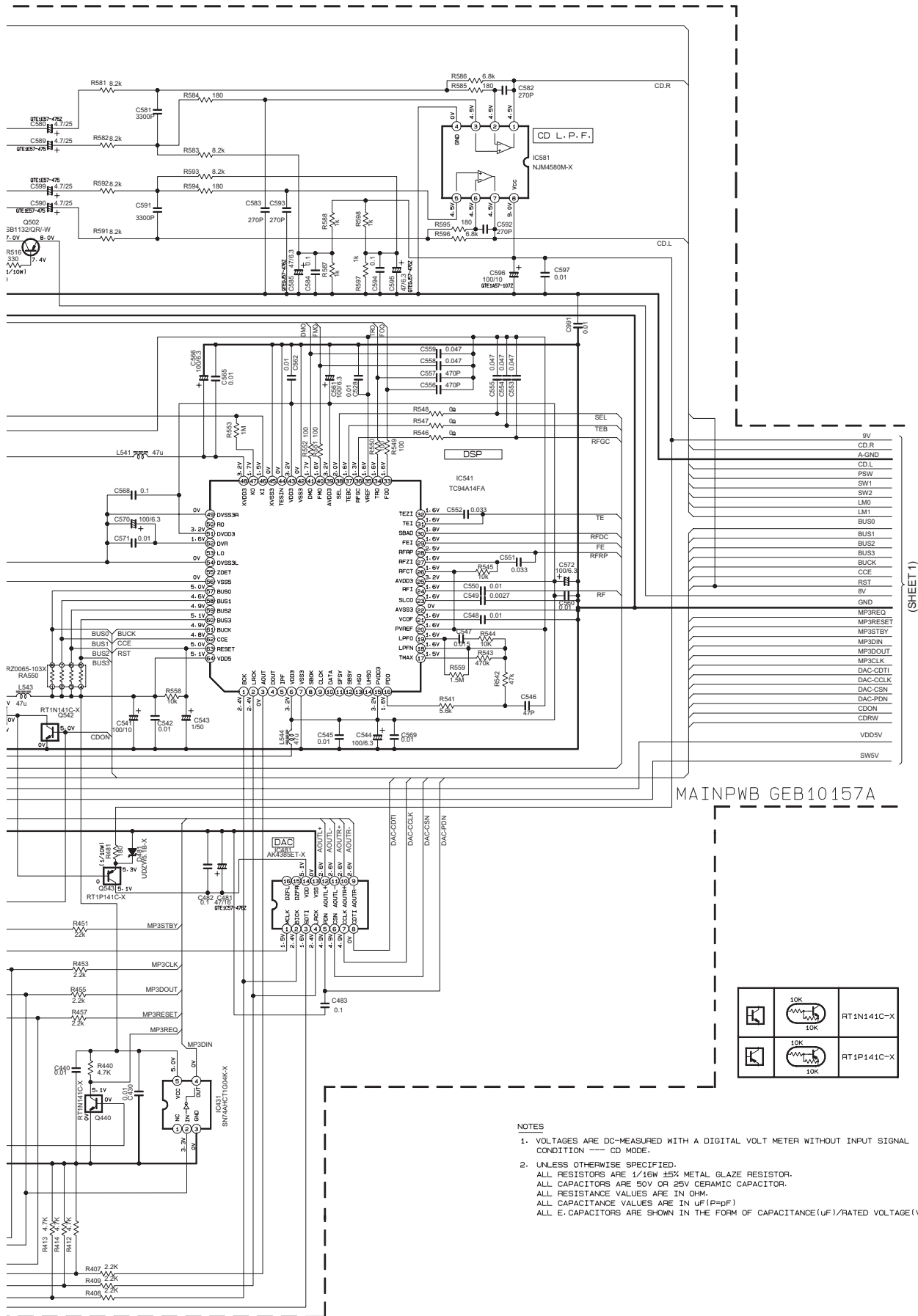
Standard schematic diagrams (For KD-G521)

■ Main amplifier section

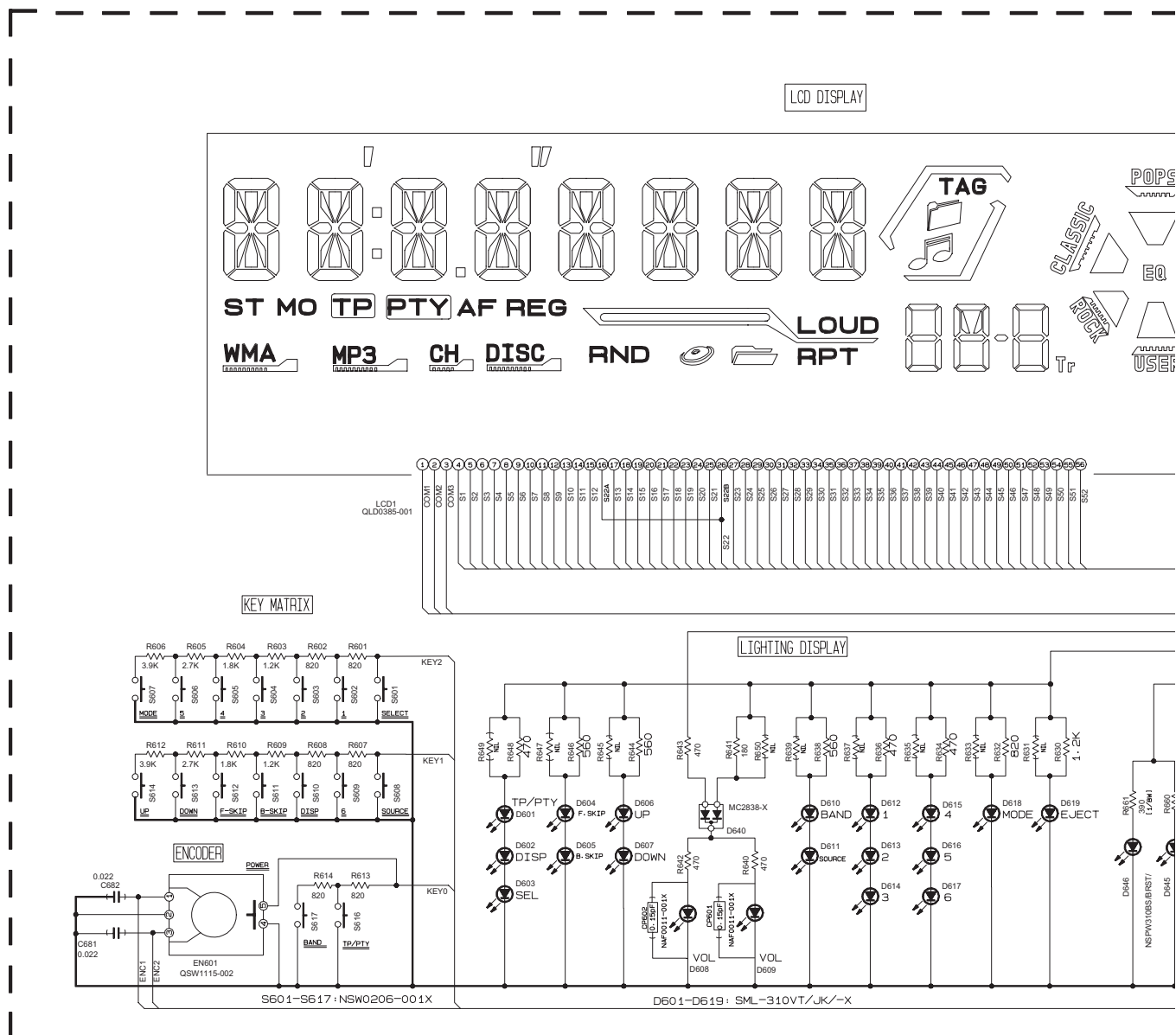


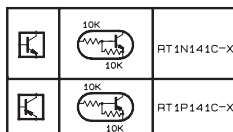
■ CD mechanism control section





■ LCD & Key control section

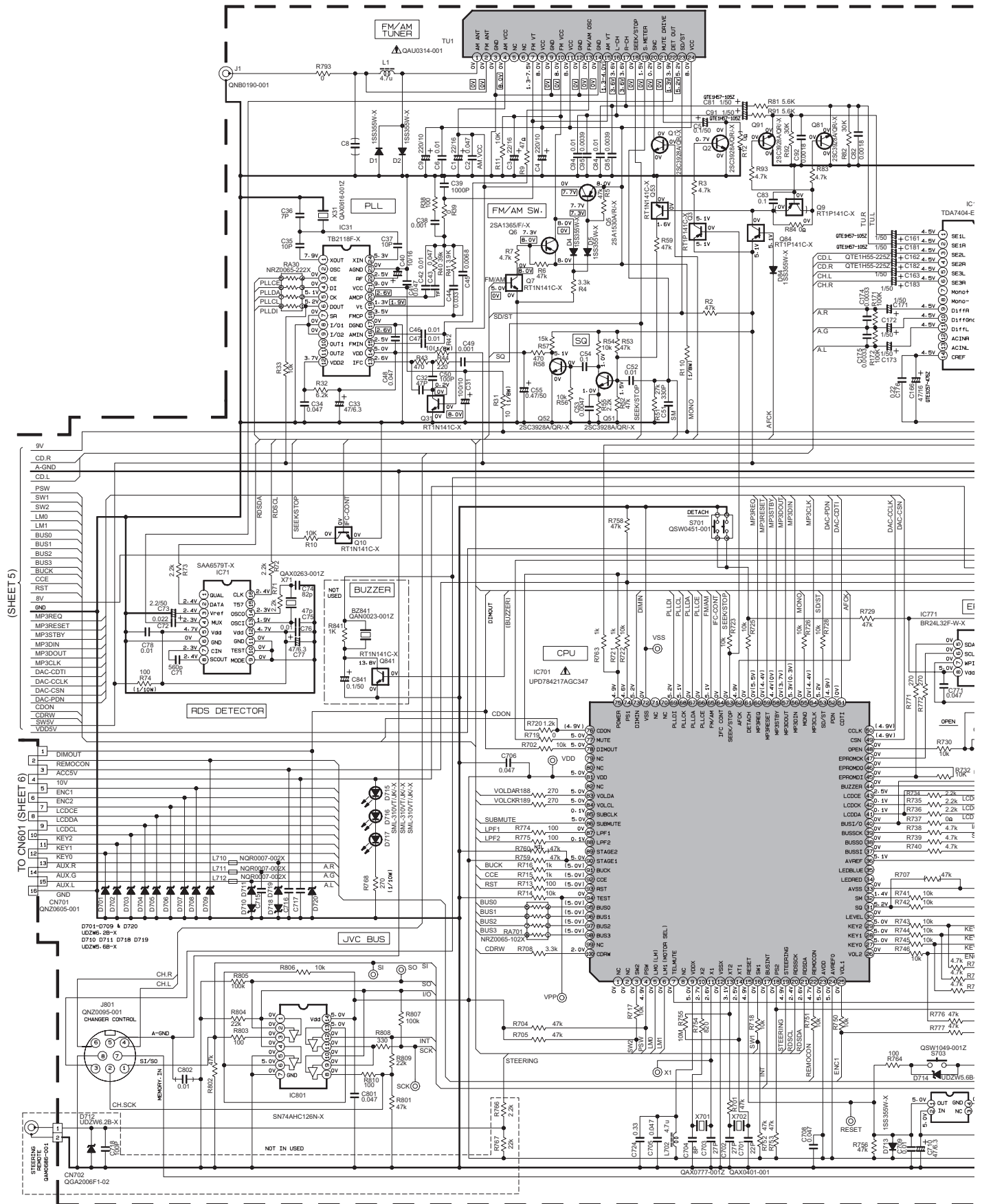


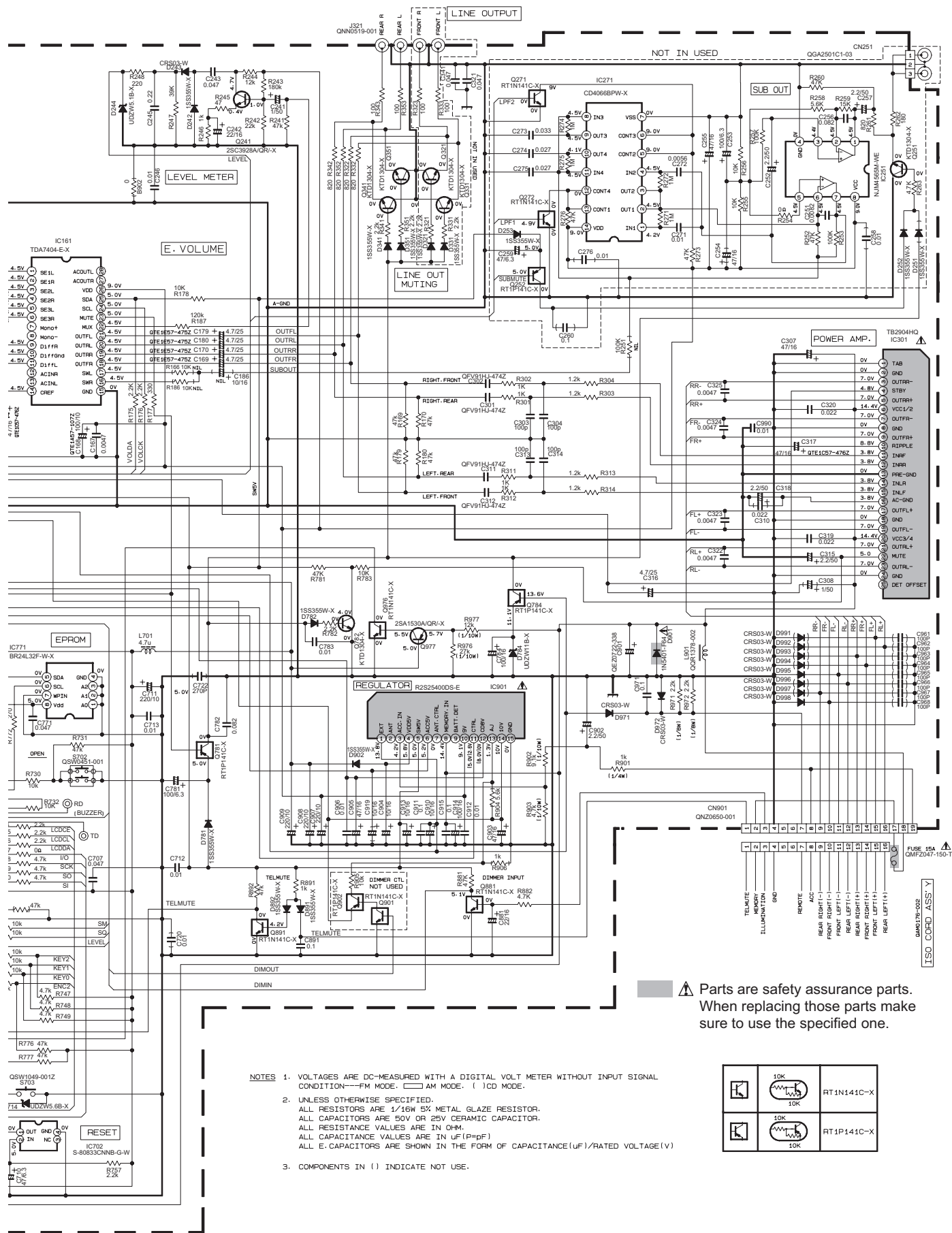


1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/16W METAL GLAZE RESISTORS.
ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM.
ALL CAPACITANCE VALUES ARE IN μF ($p=pF$)
ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V)
T --- TANTALUM CAPACITOR.
3. COMPONENTS IN () INDICATE NOT USE.

Standard schematic diagrams (For KD-G527)

■ Main amplifier section

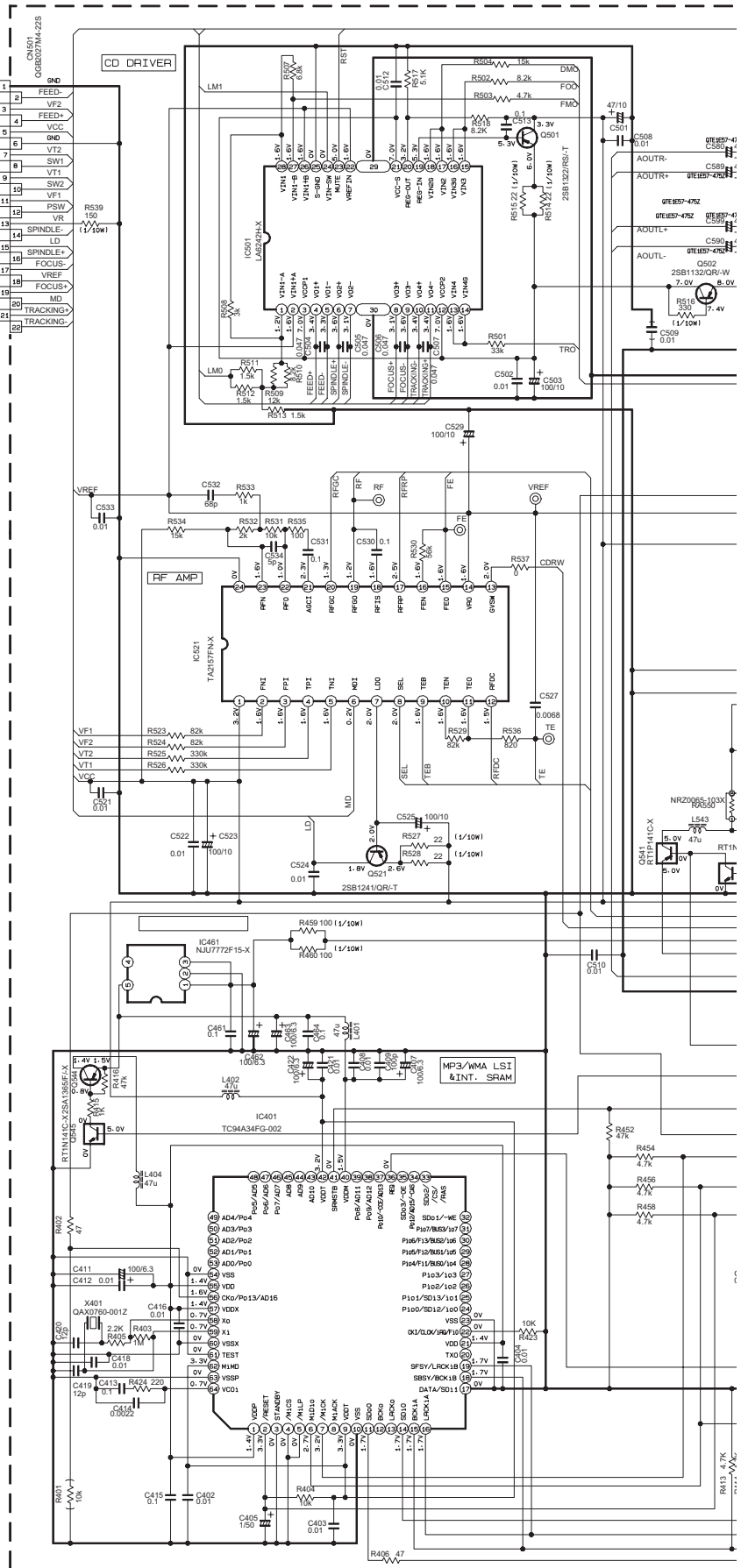
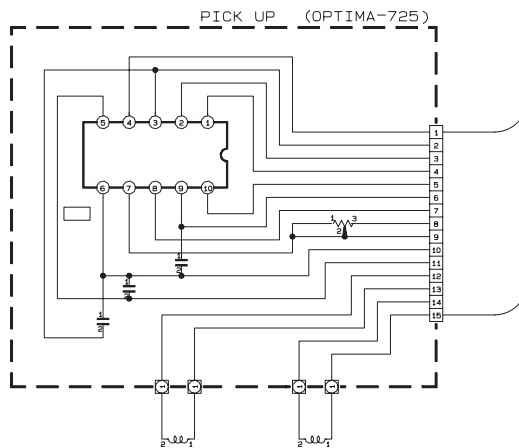
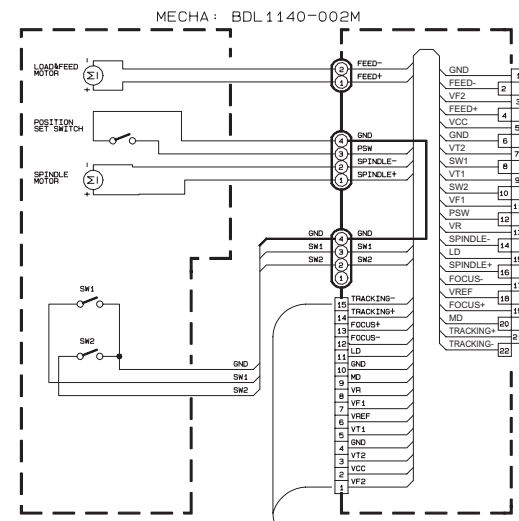




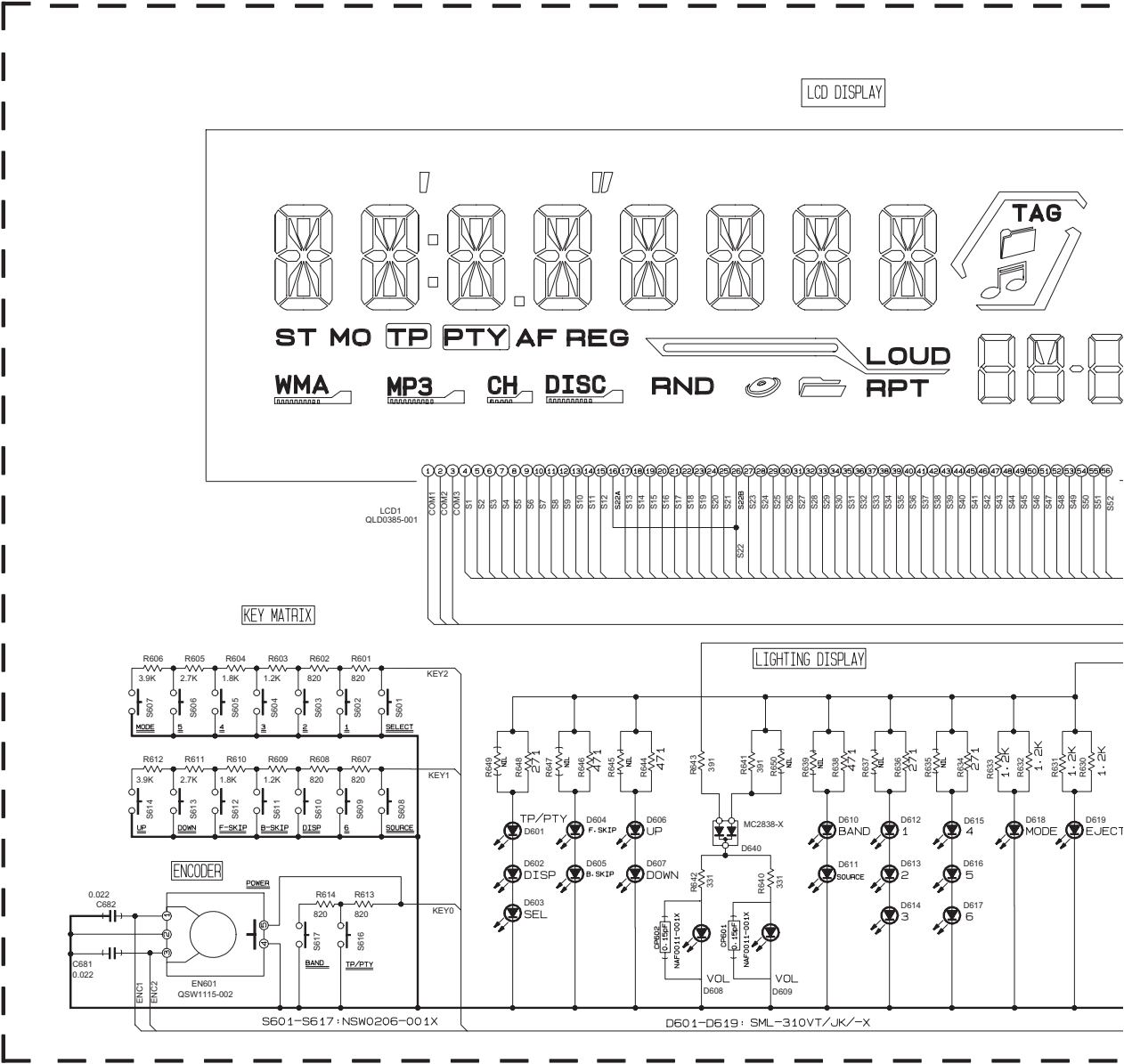
MAIN PWB GEB10157A

SHEET 4

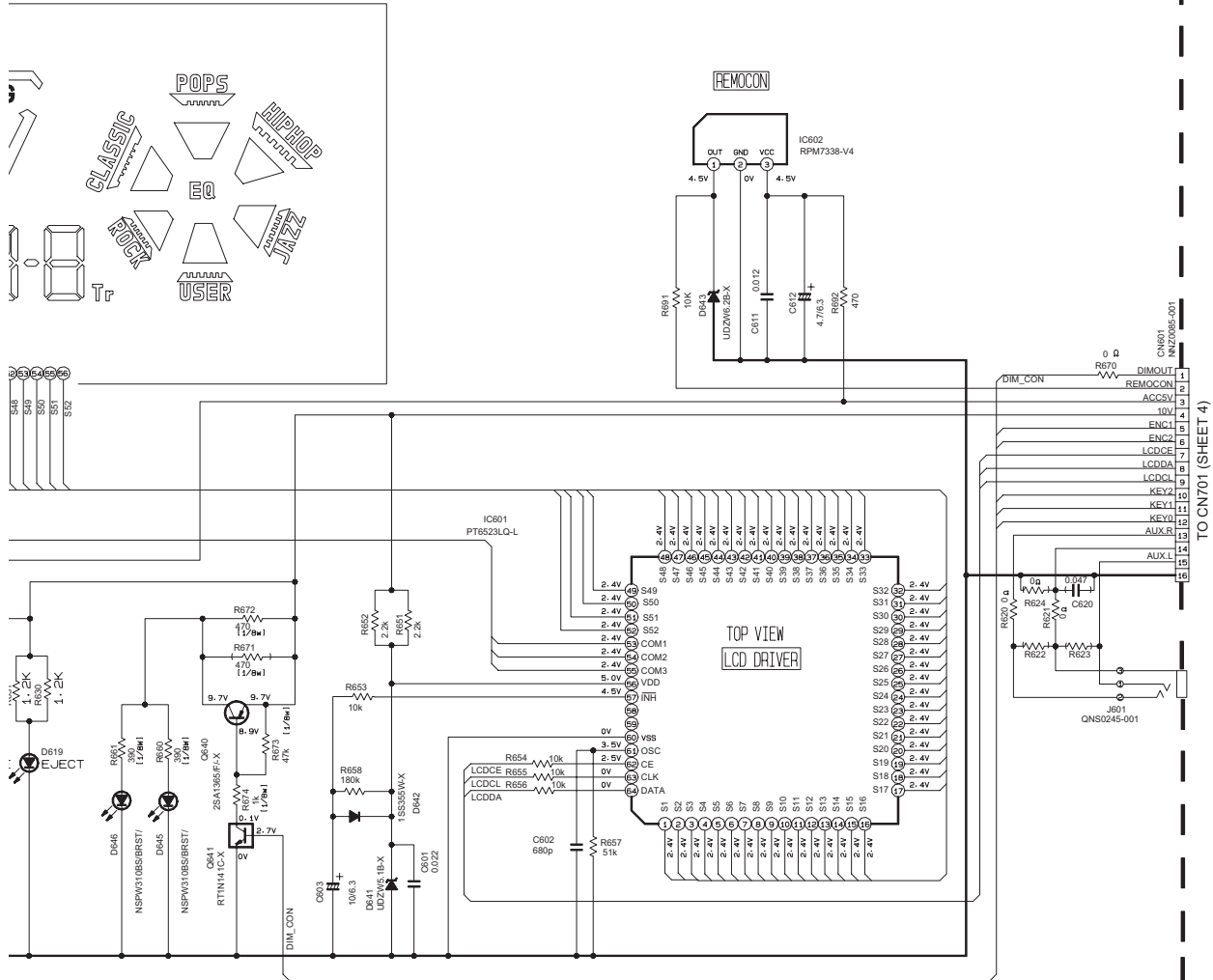
■ CD mechanism control section



■ LCD & Key control section



SW PWB:GEB10185A



	10K	RT1N141C-X
	10K	RT1P141C-X

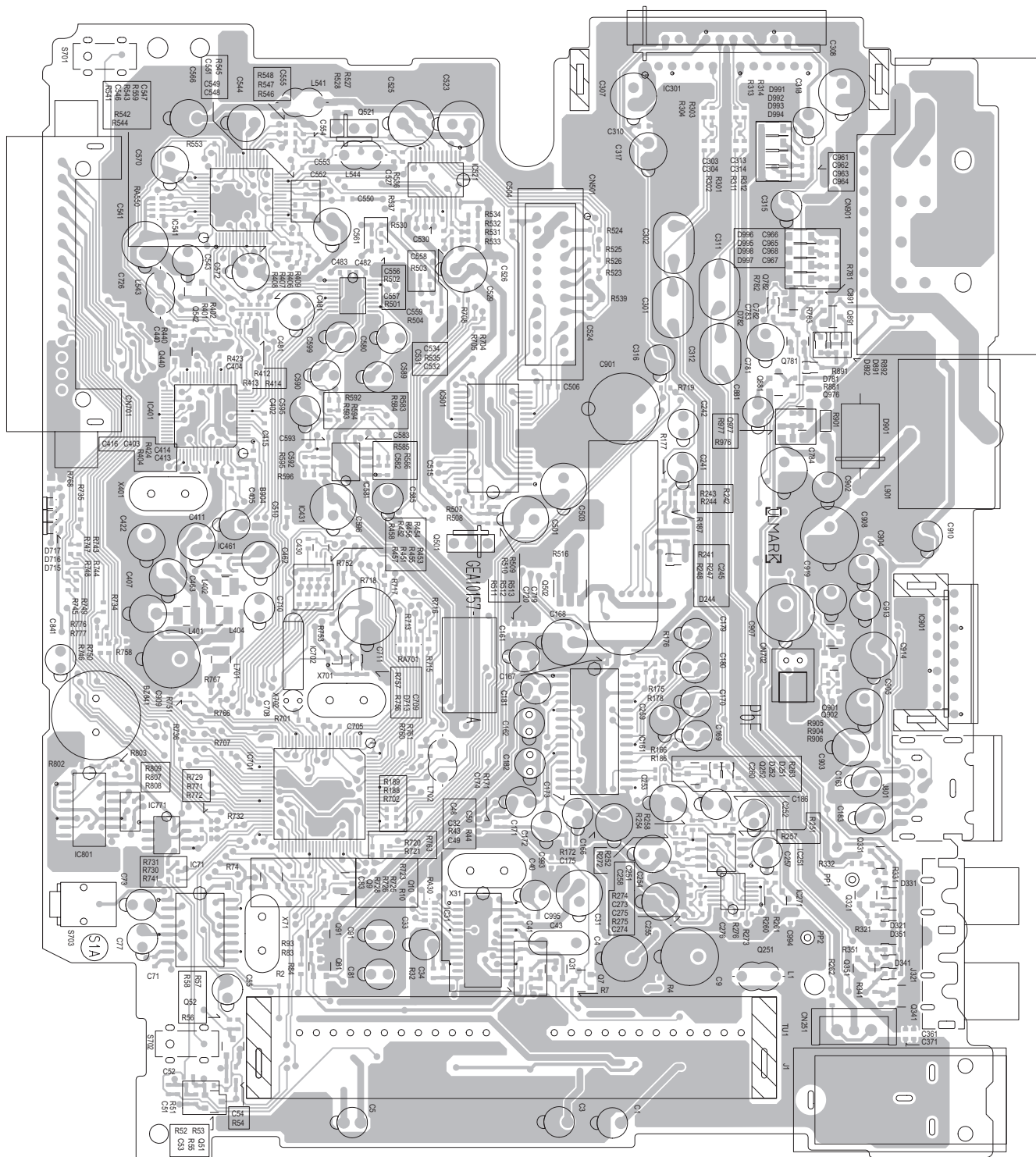
NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
- UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/16W METAL GLAZE RESISTORS.
ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM.
ALL CAPACITANCE VALUES ARE IN uF(P=pF)
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)
T --- TANTALUM CAPACITOR.
- COMPONENTS IN () INDICATE NOT USE.

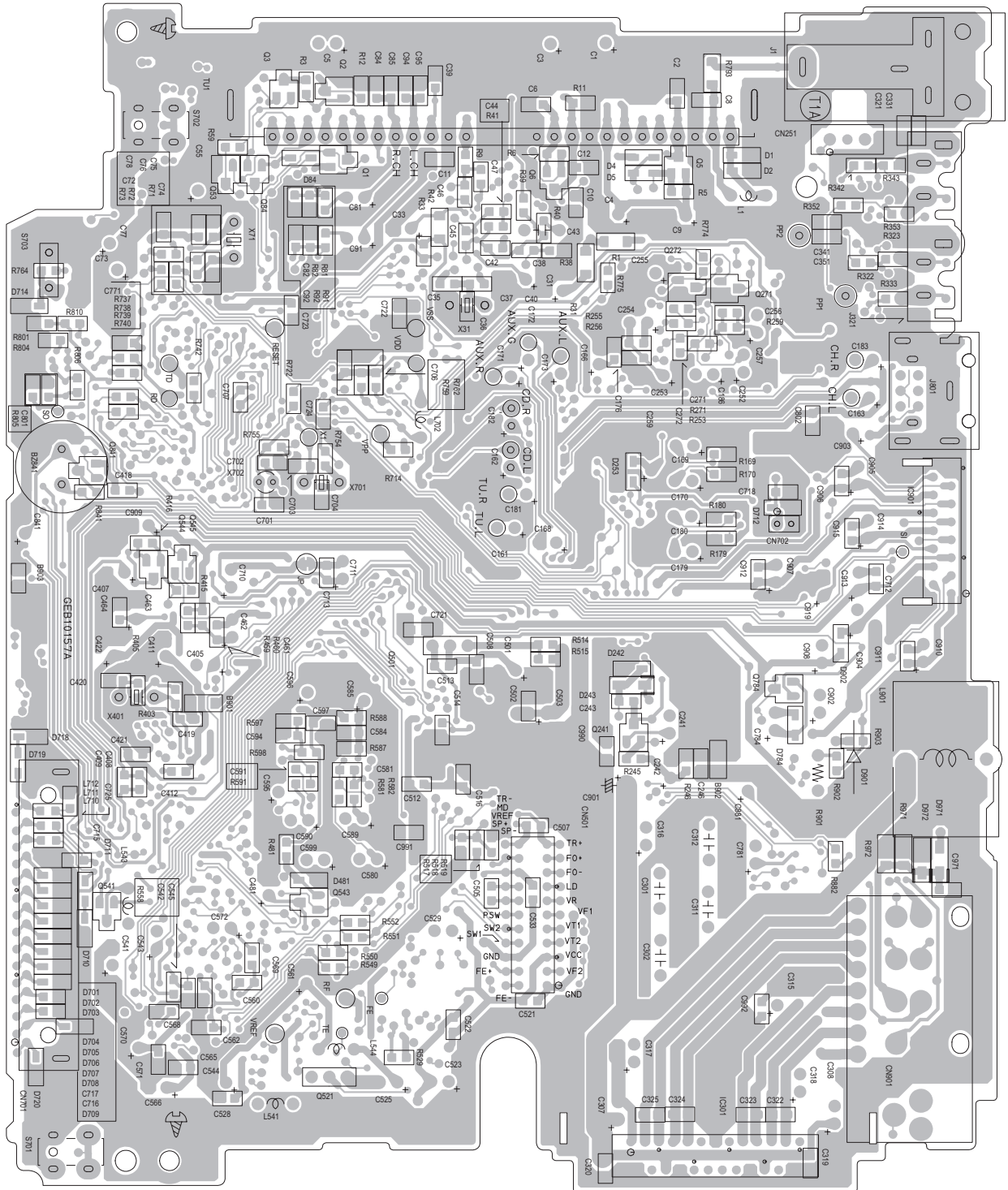
Printed circuit boards (For KD-G521 and KD-G527)

■ Main board Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

Forward side

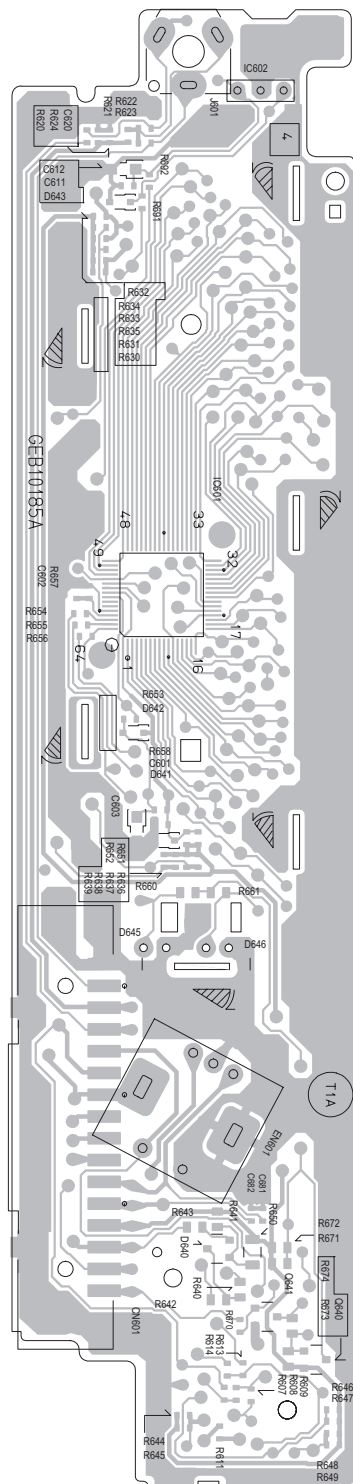


Reverse side



Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

Reverse side



< M E M O >



Victor Company of Japan, Limited

Mobile Entertainment Business Group Mobile Entertainment Category 10-1, 1chome, Ohwatari-machi, Maebashi-city, 371-8543, Japan

(No.MA232SCH)



Printed in Japan
VPT

PARTS LIST

[KD-AR470] [KD-G420]
 [KD-G521] [KD-G524]
 [KD-G525] [KD-G527]

* All printed circuit boards and its assemblies are not available as service parts.

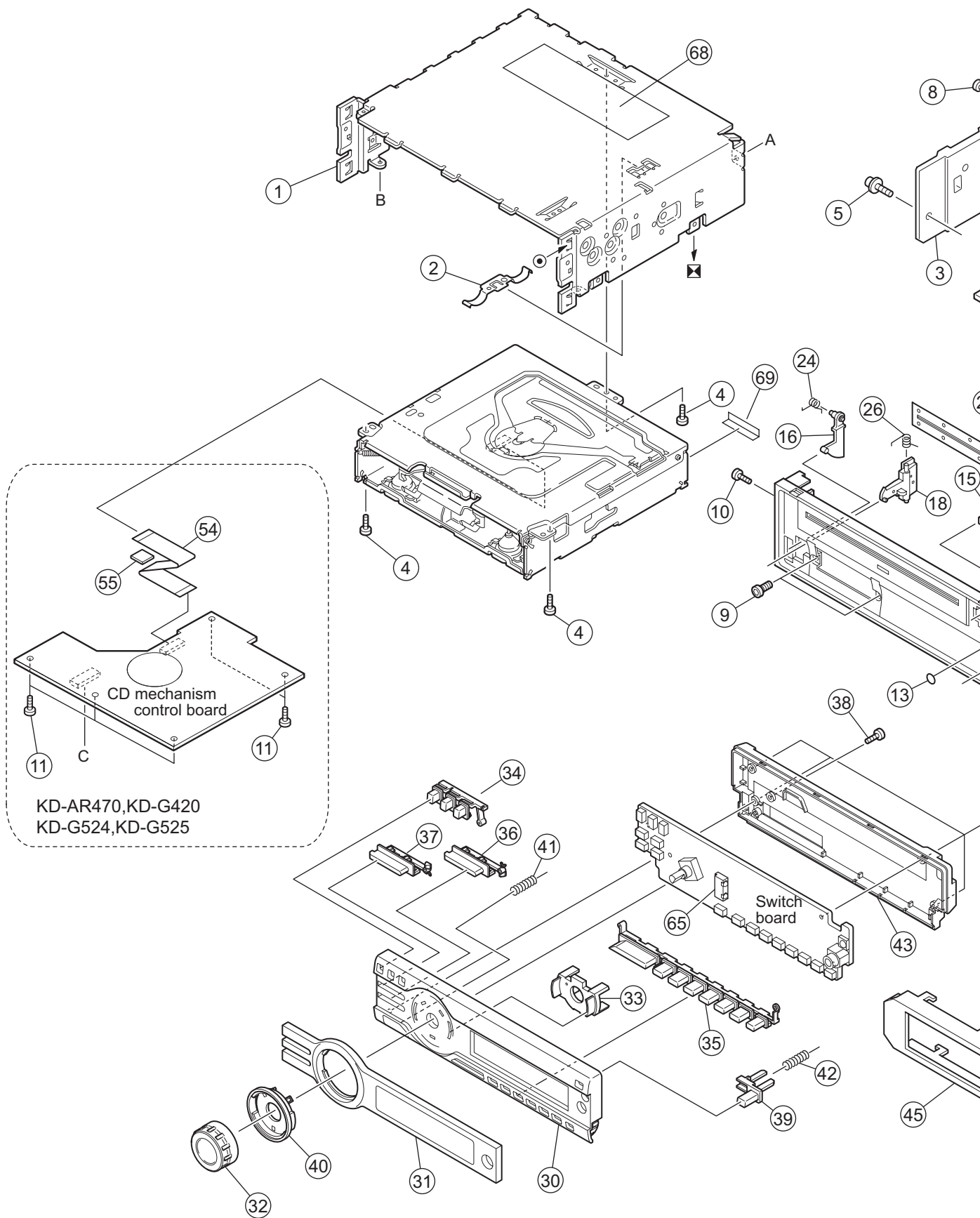
KD-AR470 , KD-G420 Area suffix J ----- Northern America	KD-G521 Area suffix E ----- Southern Europe EX ----- Northern Europe EY ----- Eastern Europe EU ----- Turkey
KD-G524 Area suffix UI ----- India	KD-G525 Area suffix U ----- Other Areas UN ----- Indonesia UT ----- Taiwan UH ----- Thailand
KD-G527 Area suffix EE ----- Russian Federation	

- Contents -

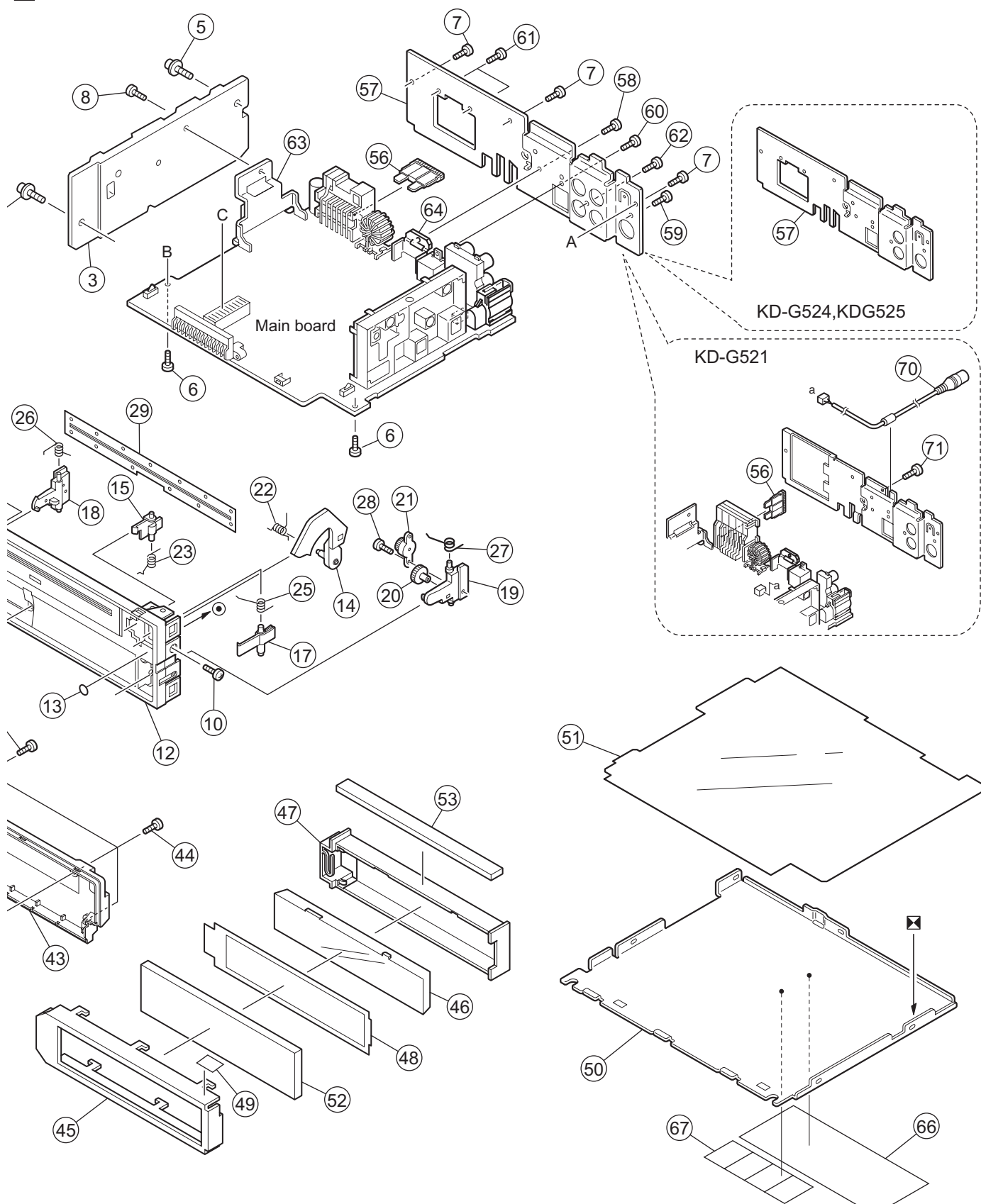
Exploded view of general assembly and parts list (Block No.M1)	3- 2
Electrical parts list (Block No.01~07)	3- 6
Packing materials and accessories parts list (Block No.M3)	3-22

Exploded view of general assembly and parts list

Block No. M 1 M M



M



General Assembly

Block No. [M][1][M][M]

Symbol No.	Part No.	Part Name	Description	Local
1	GE10043-210A	TOP CHASSIS		
2	GE40135-001A	EARTH PLATE		
3	GE30938-003A	SIDE PANEL		
4	QYSDST2604ZA	TAP SCREW	M2.6 x 4mm(x3)	
5	GE40235-001A	SCREW	(x2)	
6	GE40235-004A	SCREW	(x2)	
7	QYSDST2604ZA	TAP SCREW	M2.6 x 4mm(x3)	
8	QYSDST2610ZA	TAP SCREW	M2.6 x 10mm	
9	QYSDSF2006ZA	TAP SCREW	M2 x 6mm(x2)	
10	QYSDST2004ZA	TAP SCREW	M2 x 4mm(x2)	
11	QYSDST2004ZA	TAP SCREW	M2 x 4mm(x5)	AR470J,G420J,G524UI,G525U,G525UH,G525UN,G525UT
12	GE30823-005A	F.CHASSIS ASSY		
13	FSYH4036-098	SHEET		
14	GE30827-002A	OPEN LEVER		
15	GE30824-002A	LOCK LEVER(O.L)		
16	GE31245-002A	RELEASE LEVER		
17	GE30829-001A	LOCK LEVER(TOP)		
18	GE31607-001A	LOCK LEVER(L)		
19	GE31608-001A	LOCK LEVER(R)		
20	GE40154-001A	GEAR		
21	QZW0108-002	OIL DAMPER		
22	GE40153-001A	T.SPRING		
23	GE40157-001A	T.SPRING		
24	VKW5264-005	T.SPRING		
25	FSKW4012-002	T.SPRING		
26	VKW5263-002	T.SPRING		
27	GE40155-001A	T.SPRING		
28	QYSDSF2006ZA	TAP SCREW	M2 x 6mm	
29	GE40156-001A	BLIND		
30	GE31590-028A	FRONT PANEL ASSY		AR470J
30	GE31590-027A	FRONT PANEL ASSY		G420J
30	GE31590-005A	FRONT PANEL ASSY		G521E,G521EU,G521EX,G521EY
30	GE31590-015A	FRONT PANEL ASSY		G524UI,G525U,G525UH,G525UN,G525UT
30	GE31590-006A	FRONT PANEL ASSY		G527EE
31	GE31591-026A	FINDER ASSY		AR470J
31	GE31591-022A	FINDER ASSY		G420J
31	GE31591-029A	FINDER ASSY		G521E,G521EU,G521EX,G521EY
31	GE31591-027A	FINDER ASSY		G524UI
31	GE31591-023A	FINDER ASSY		G525U,G525UH,G525UN,G525UT
31	GE31591-025A	FINDER ASSY		G527EE
32	GE40298-001A	VOLUME KNOB ASS		G521E,G521EU,G521EX,G521EY,G524UI,G525U,G525UH,G525UN,G525UT
32	GE40298-002A	VOLUME KNOB ASS		AR470J,G420J,G527EE
33	GE31599-001A	RIM LENS		
34	GE31593-001A	D.FUNC BTN		AR470J
34	GE31593-008A	D.FUNC BTN		G420J
34	GE31593-012A	D.FUNC BTN		G521E,G521EU,G521EX,G521EY
34	GE31593-003A	D.FUNC BTN		G524UI,G525U,G525UH,G525UN,G525UT
34	GE31593-002A	D.FUNC BTN		G527EE
35	GE20175-007A	PRESET BUTTON		AR470J
35	GE20175-010A	PRESET BUTTON		G420J,G521E,G521EU,G521EX,G521EY
35	GE20175-008A	PRESET BUTTON		G524UI,G525U,G525UH,G525UN,G525UT
35	GE20175-006A	PRESET BUTTON		G527EE
36	GE31594-001A	UP/DOWN BTN		G521E,G521EU,G521EX,G521EY
36	GE31594-007A	UP/DOWN BTN		G420J,G524UI,G525U,G525UH,G525UN,G525UT
36	GE31594-006A	UP/DOWN BTN		AR470J,G527EE
37	GE31595-001A	SEARCH BTN		G521E,G521EU,G521EX,G521EY
37	GE31595-007A	SEARCH BTN		G420J,G524UI,G525U,G525UH,G525UN,G525UT
37	GE31595-006A	SEARCH BTN		AR470J,G527EE
38	VKZ4777-010	MINI SCREW		
39	GE31601-003A	EJECT BUTTON		G420J,G521E,G521EU,G521EX,G521EY
39	GE31601-004A	EJECT BUTTON		G524UI,G525U,G525UH,G525UN,G525UT
39	GE31601-002A	EJECT BUTTON		AR470J,G527EE
40	GE31598-001A	RIM COVER		G521E,G521EU,G521EX,G521EY,G524UI,G525U,G525UH,G525UN,G525UT
40	GE31598-002A	RIM COVER		AR470J,G420J,G527EE
41	FSKW3002-012	COMP.SPRING		
42	GE40202-012A	COMPRESSION SPRING		
43	GE10107-002A	REAR COVER		
44	VKZ4777-010	MINI SCREW	(x4)	
45	GE31603-001A	LCD CASE		
46	GE31604-001A	LCD LENS		
47	GE31605-001A	LENS CASE		
48	GE40251-002A	LIGHTING SHEET		
49	GE40218-032A	SHEET		

△	Symbol No.	Part No.	Part Name	Description	Local
	50	GE30393-002A	BOTTOM COVER		
	51	FSMA3005-001	INSULATOR		
	52	QLD0397-001	LCD MODULE		AR470J,G420J
	52	QLD0385-001	LCD MODULE		G521E,G521EU,G521EX,G521EY,G524UI,G525U G525UH,G525UN,G525UT,G527EE
	53	QNZ0772-001	RUBBER CONN		
	54	QUQ105-2207AE-E	FFC WIRE	22pin 7cm	AR470J,G420J,G524UI,G525U,G525UH,G525UN,G525UT
	55	VYSH101-009	SPACER		AR470J,G420J,G524UI,G525U,G525UH,G525UN,G525UT
△	56	QMFZ047-150-T	FUSE	15A	
	57	GE30912-015A	REAR BRACKET		AR470J,G420J
	57	GE30912-019A	REAR BRACKET		G524UI,G525U,G525UH,G525UN,G525UT
	57	GE30912-018A	REAR BARCKET		G521E,G521EU,G521EX,G521EY,G527EE
	58	QYSDST2606ZA	TAP SCREW	M2.6 x 6mm	
	59	QYSDST2606ZA	TAP SCREW	M2.6 x 6mm	
	60	QYSDST2606ZA	TAP SCREW	M2.6 x 6mm	
	61	QYSDSF2606ZA	TAP SCREW	M2.6 x 6mm(x2)	AR470J,G420J,G524UI,G525U,G525UH,G525UN,G525UT
	62	QYSDSF2606ZA	TAP SCREW	M2.6 x 6mm	
	63	GE40172-004A	IC BRACKET		
	64	GE40124-002A	REG BRACKET		
	65	GE30854-001A	LED HOLDER		
	66	GE31888-001A	NAME PLATE		AR470J
	66	GE31891-001A	NAME PLATE		G420J
	66	GE31899-001A	NAME PLATE		G521E,G521EU,G521EX,G521EY
	66	GE32038-001A	NAME PLATE		G524UI
	66	GE31896-001A	NAME PLATE		G525U,G525UH,G525UN,G525UT
	66	GE31902-002A	NAME PLATE		G527EE
	67	LV41843-002A	LASER CAUTION		G521E,G521EU,G521EX,G521EY,G524UI,G525U G525UH,G525UN,G525UT,G527EE
	68	GE31574-028A	UT LABEL		G525UT
	69	FSYH4036-100	SHEET		G521E,G521EU,G521EX,G521EY
△	70	QAM0686-001	STEERING REMOTE		G521E,G521EU,G521EX,G521EY
	71	QYSDST2604ZA	TAP SCREW	M2.6 x 4mm	G521E,G521EU,G521EX,G521EY

Electrical parts list

Main board (KD-AR470/G420/G524/G525)

Block No. [0][1]

△ Symbol No.	Part No.	Part Name	Description	Local
IC31	TB2118F-X	PLL IC		
IC161	TDA7404D-E-X	IC		
△ IC301	TB2904HQ	IC		
IC361	NJM2160BV-X	IC		AR470J
IC381	NJM2160BV-X	IC		AR470J
△ IC701	UPD784217AGC348	IC		
IC702	S-80833CNNB-G-W	IC		
IC771	BR24L16F-W-X	IC		
IC801	HD74HC126FP-X	IC		AR470J G420J G524UI G525U G525UH G525UN G525UT
IC801	SN74AHC126NS-X	IC		
△ IC901	R2S25400DS-E	REGULATOR IC		
Q1	KTD1304-X	TRANSISTOR		
Q5	2SA1530A/R/-X	TRANSISTOR		
Q6	2SA1365/F/-X	TRANSISTOR		
Q7	RT1N141C-X	DIGI TRANSISTOR		
Q8	RT1N141C-X	DIGI TRANSISTOR		
Q31	RT1N141C-X	DIGI TRANSISTOR		
Q241	2SC3928A/R/-X	TRANSISTOR		
Q272	RT1P141C-X	DIGI TRANSISTOR		
Q321	KTD1304-X	TRANSISTOR		AR470J G420J
Q331	KTD1304-X	TRANSISTOR		AR470J G420J
Q341	KTD1304-X	TRANSISTOR		
Q351	KTD1304-X	TRANSISTOR		
Q701	RT1N141C-X	DIGI TRANSISTOR		
Q702	RT1N141C-X	DIGI TRANSISTOR		
Q703	RT1N141C-X	DIGI TRANSISTOR		
Q704	RT1N141C-X	DIGI TRANSISTOR		
Q705	RT1N141C-X	DIGI TRANSISTOR		
Q781	RT1P141C-X	DIGI TRANSISTOR		
Q782	KTD1304-X	TRANSISTOR		
Q784	RT1P141C-X	DIGI TRANSISTOR		
Q881	RT1N141C-X	DIGI TRANSISTOR		
Q891	RT1N141C-X	DIGI TRANSISTOR		AR470J
Q901	2SB1132/QR/-W	TRANSISTOR		
Q976	RT1N141C-X	DIGI TRANSISTOR		
Q977	2SA1530A/QR/-X	TRANSISTOR		
D1	1SS355W-X	DIODE C.M		
D2	1SS355W-X	DIODE C.M		
D4	1SS355W-X	DIODE C.M		
D5	1SS355W-X	DIODE C.M		
D6	1SS355W-X	DIODE C.M		G524UI G525U G525UH G525UN G525UT
D242	1SS355W-X	DIODE C.M		
D243	CRS03-W	SB DIODE		
D244	UDZW5.1B-X	SI DIODE		
D273	1SS355W-X	DIODE C.M		
D321	1SS355W-X	DIODE C.M		AR470J G420J
D325	UDZS11B-X	Z DIODE		AR470J
D325	UDZW11B-X	Z DIODE		G420J G524UI G525U G525UH G525UN G525UT
D331	1SS355W-X	DIODE C.M		AR470J G420J
D341	1SS355W-X	DIODE C.M		
D351	1SS355W-X	DIODE C.M		
D701	UDZW6.2B-X	SI DIODE		
D702	UDZW6.2B-X	SI DIODE		
D703	UDZW6.2B-X	SI DIODE		
D704	UDZW6.2B-X	SI DIODE		
D705	UDZW6.2B-X	SI DIODE		
D706	UDZW6.2B-X	SI DIODE		
D707	UDZW6.2B-X	SI DIODE		
D708	UDZW6.2B-X	SI DIODE		
D709	UDZW6.2B-X	SI DIODE		

△ Symbol No.	Part No.	Part Name	Description	Local
D710	1SS355W-X	DIODE C.M		
D711	UDZW6.2B-X	SI DIODE		
D713	UDZW5.6B-X	Z DIODE		
D714	SML-310VT/JK/-X	LED		
D715	SML-310VT/JK/-X	LED		
D716	SML-310VT/JK/-X	LED		
D717	UDZW6.2B-X	SI DIODE		
D718	UDZW6.2B-X	SI DIODE		
D719	UDZW6.2B-X	SI DIODE		
D720	UDZW6.2B-X	SI DIODE		
D781	1SS355W-X	DIODE C.M		
D782	1SS355W-X	DIODE C.M		
D783	1SS355W-X	DIODE C.M		
D784	UDZS11B-X	Z DIODE		AR470J G420J G524UI G525U G525UH G525UN G525UT
D784	UDZW11B-X	Z DIODE		
D851	CRS03-W	SB DIODE		G525U G525UH G525UN G525UT
D852	CRS03-W	SB DIODE		G524UI G525U G525UH G525UN G525UT
D891	1SS355W-X	DIODE C.M		AR470J
D892	1SS355W-X	DIODE C.M		AR470J
D901	1N5401-F64	DIODE		
D902	1SS355W-X	DIODE C.M		
D971	CRS03-W	SB DIODE		
D972	CRS03-W	SB DIODE		
D996	CRS03-W	SB DIODE		
D997	CRS03-W	SB DIODE		
C1	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C2	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C3	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C4	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C5	QEKJ1HM-104Z	E CAPACITOR	0.1uF 50V M	
C6	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C9	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C10	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C11	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C12	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C30	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C31	QERF1AM-107Z	E CAPACITOR	100uF 10V M	
C32	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C33	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C34	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C35	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C36	NDC31HJ-7R0X	C CAPACITOR	7pF 50V J	
C37	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C38	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C39	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C40	QERF1CM-106Z	E CAPACITOR	10uF 16V M	
C41	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C42	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C43	QFV61HJ-473Z	MF CAPACITOR	0.047uF 50V J	
C44	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C45	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C46	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C47	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C48	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C49	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C50	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C51	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C81	QTE1H56-105Z	E CAPACITOR	1uF 50V	
C82	NCB31HK-682X	C CAPACITOR	6800pF 50V K	AR470J G420J G524UI G525U G525UH G525UN G525UT
C82	NCB31HK-182X	C CAPACITOR	1800pF 50V K	AR470J G420J G524UI G525U G525UH G525UN G525UT
C84	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	AR470J G420J
C85	NCB31EK-153X	C CAPACITOR	0.015uF 25V K	AR470J G420J

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C85	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	G524UI G525UH G525UN G525UT	C394	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	AR470J
C91	QTE1H56-105Z	E CAPACITOR	1uF 50V		C701	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
C92	NCB31HK-682X	C CAPACITOR	6800pF 50V K	AR470J G420J	C702	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
				G524UI G525UH G525UN G525UT	C703	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C92	NCB31HK-182X	C CAPACITOR	1800pF 50V K		C704	NDC31HJ-8R0X	C CAPACITOR	8pF 50V J	
				AR470J G420J	C705	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C94	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C706	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C95	NCB31EK-153X	C CAPACITOR	0.015uF 25V K	AR470J G420J	C707	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
				G524UI G525UH G525UN G525UT	C708	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C95	NCB31HK-123X	C CAPACITOR	0.012uF 50V K		C709	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C161	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C710	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C162	QTE1H56-105Z	E CAPACITOR	1uF 50V		C711	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C163	QTE1H55-225Z	E CAPACITOR	2.2uF 50V		C713	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C165	QERF1HM-105Z	E CAPACITOR	1uF 50V M		C716	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C171	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C717	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C172	QTE1H56-105Z	E CAPACITOR	1uF 50V		C720	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C173	QTE1H55-225Z	E CAPACITOR	2.2uF 50V		C721	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C174	QERF1HM-105Z	E CAPACITOR	1uF 50V M		C722	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C175	QERF1HM-105Z	E CAPACITOR	1uF 50V M		C723	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C176	NCB31HK-473X	C CAPACITOR	0.047uF 50V K		C724	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C177	NCB31HK-473X	C CAPACITOR	0.047uF 50V K		C725	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C179	QTE1C56-476Z	E CAPACITOR	47uF 16V		C726	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C181	QTE1C56-107Z	E CAPACITOR	100uF 16V		C727	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C182	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C728	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C184	NCB31CK-224X	C CAPACITOR	0.22uF 16V K		C729	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	
C241	QERF1HM-105Z	E CAPACITOR	1uF 50V M		C730	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C242	QERF1CM-226Z	E CAPACITOR	22uF 16V M		C740	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C243	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C743	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C245	QERF1HM-224Z	E CAPACITOR	0.22uF 50V M		C744	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C279	QERF0JM-476Z	E CAPACITOR	47uF 6.3V M		C745	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C281	NCB31EK-823X	C CAPACITOR	0.082uF 25V K		C746	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C301	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J		C747	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C302	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J		C771	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C303	NCB31HK-472X	C CAPACITOR	4700pF 50V K		C781	QERF0JM-476Z	E CAPACITOR	47uF 6.3V M	
C304	NCB31HK-472X	C CAPACITOR	4700pF 50V K		C782	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C311	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J		C784	QERF1CM-107Z	E CAPACITOR	100uF 16V M	
C312	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J		C801	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C313	NCB31HK-472X	C CAPACITOR	4700pF 50V K		C802	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C314	NCB31HK-472X	C CAPACITOR	4700pF 50V K		C803	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
C315	QERF1HM-225Z	E CAPACITOR	2.2uF 50V M		C804	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
C316	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M						G524UI G525UH G525UN G525UT
C317	QTE1C56-226Z	E CAPACITOR	22uF 16V		C851	QERF1CM-106Z	E CAPACITOR	10uF 16V M	
C318	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M						G524UI G525UH G525UN G525UT
C319	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C852	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C320	NCB31EK-104X	C CAPACITOR	0.1uF 25V K						
C322	NCB21HK-472X	C CAPACITOR	4700pF 50V K		C881	QERF1CM-226Z	E CAPACITOR	22uF 16V M	
C323	NCB21HK-472X	C CAPACITOR	4700pF 50V K		C891	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	AR470J
C324	NCB21HK-472X	C CAPACITOR	4700pF 50V K		C901	QEZ0723-338	E CAPACITOR	3300uF	
C325	NCB21HK-472X	C CAPACITOR	4700pF 50V K		C902	QERF1HM-225Z	E CAPACITOR	2.2uF 50V M	
C341	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C903	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
C360	NCB31HK-152X	C CAPACITOR	1500pF 50V K	AR470J	C904	QERF1CM-106Z	E CAPACITOR	10uF 16V M	
C361	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M	AR470J	C905	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
C362	NCB31HK-152X	C CAPACITOR	1500pF 50V K	AR470J	C906	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C363	QERF1CM-476Z	E CAPACITOR	47uF 16V M	AR470J	C907	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C365	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M	AR470J	C908	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C366	QERF1AM-107Z	E CAPACITOR	100uF 10V M	AR470J	C909	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C367	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M	AR470J G420J	C910	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
C368	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M		C911	QERF1CM-106Z	E CAPACITOR	10uF 16V M	
C369	QERF1AM-107Z	E CAPACITOR	100uF 10V M	AR470J	C912	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C380	NCB31HK-152X	C CAPACITOR	1500pF 50V K	AR470J	C914	QERF1CM-107Z	E CAPACITOR	100uF 16V M	
C381	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M	AR470J	C915	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C382	NCB31HK-152X	C CAPACITOR	1500pF 50V K	AR470J	C916	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
C383	QERF1CM-476Z	E CAPACITOR	47uF 16V M	AR470J	C961	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C385	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M	AR470J	C962	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C386	QERF1AM-107Z	E CAPACITOR	100uF 10V M	AR470J	C963	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C387	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M	AR470J G420J	C964	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C388	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M		C965	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C389	QERF1AM-107Z	E CAPACITOR	100uF 10V M	AR470J	C966	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C390	QERF1AM-107Z	E CAPACITOR	100uF 10V M	AR470J	C967	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C391	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	AR470J	C968	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C392	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	AR470J	C971	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C393	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	AR470J					
					R1	NRS181J-120X	MG RESISTOR	12Ω 1/8W J	
					R2	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
					R4	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
					R5	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R6	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R352	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R7	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R353	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R8	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R361	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	AR470J
R9	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R362	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	AR470J
R11	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R363	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	AR470J
R31	NRS181J-100X	MG RESISTOR	10Ω 1/8W J		R365	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	AR470J
R32	NRSA63J-622X	MG RESISTOR	6.2kΩ 1/16W J		R366	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	AR470J
R33	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R367	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	AR470J
R38	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R368	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	AR470J G420J
R39	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R369	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R40	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J		R370	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	AR470J
R41	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R371	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	AR470J
R42	NRS181J-100X	MG RESISTOR	10Ω 1/8W J		R381	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	AR470J
R43	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R382	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	AR470J
R44	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R383	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	AR470J
R50	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	AR470J G420J G524UI G525U G525UH G525UN G525UT	R385	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	AR470J
R50	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		R386	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	AR470J
R52	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R387	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	AR470J
R81	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	AR470J G420J G524UI G525U G525UH G525UN G525UT	R388	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	AR470J G420J
R81	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J		R389	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R82	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	AR470J G420J G524UI G525U G525UH G525UN G525UT	R390	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	AR470J
R82	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R391	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	AR470J
R91	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R395	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	G420J G420J G524UI G525U G525UH G525UN G525UT
R91	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J	AR470J G420J G524UI G525U G525UH G525UN G525UT	R396	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R92	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	AR470J G420J G524UI G525U G525UH G525UN G525UT	R397	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	G420J G420J G524UI G525U G525UH G525UN G525UT
R92	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R398	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R158	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R701	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R159	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R709	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R161	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R714	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R162	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R719	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R163	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J		R720	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R196	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		R721	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R197	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		R722	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R241	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R723	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R242	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R725	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R243	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J		R726	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R244	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J		R728	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R245	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R729	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R246	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R730	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R247	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J		R731	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R248	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R732	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R291	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	AR470J G420J G420J	R734	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R292	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R735	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R301	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R736	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R302	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R737	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R307	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R738	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R308	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R739	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R311	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R740	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R312	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R741	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R317	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R743	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R318	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R744	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R321	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	AR470J G420J AR470J G420J	R745	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R322	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R746	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R323	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R747	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R331	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R748	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R332	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	AR470J G420J AR470J G420J	R749	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R333	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R750	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R341	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R751	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R342	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R753	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R343	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R754	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R351	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R755	NRSA63J-106X	MG RESISTOR	10MΩ 1/16W J	
					R756	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
					R757	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
					R758	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
					R759	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	G420J G524UI G525U G525UH G525UN G525UT AR470J
					R760	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
					R763	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
					R764	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local
R765	NRS181J-271X	MG RESISTOR	270Ω 1/8W J	AR470J G524UI G525U G525UH G525UN G525UT G420J
R766	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R767	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R768	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R771	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R772	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R775	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R776	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R780	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R781	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R783	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	G524UI G525U G525UH G525UN G525UT
R784	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R785	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R787	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R791	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R792	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R793	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R801	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R802	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R803	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R804	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	AR470J AR470J AR470J
R805	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R806	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R807	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R808	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R809	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R810	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R851	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R881	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R882	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	AR470J AR470J AR470J
R891	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R892	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R893	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R901	QRE142J-102X	C RESISTOR	1kΩ 1/4W J	
R902	NRSA02J-912X	MG RESISTOR	9.1kΩ 1/10W J	
R903	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	
R904	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J	
R971	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R972	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R976	NRSA02J-203X	MG RESISTOR	20kΩ 1/10W J	AR470J G420J G524UI G525U G525UH G525UN G525UT
R977	NRSA02J-822X	MG RESISTOR	8.2kΩ 1/10W J	
RA30	NRZ0065-222X	NET RESISTOR	2.2kΩ	
L1	QQL244J-4R7Z	COIL	4.7uH J	
L701	QQL244K-4R7Z	COIL	4.7uH K	
L901	QQR1378-002	COIL		
CN101	QGB2027M4-22S	CONNECTOR	B-B (1-22)	AR470J G420J G524UI G525U G525UH G525UN G525UT
CN701	QNZ0605-001	CAR CONNECTOR		
CN901	QNZ0611-001	16P CONNECTOR		
J1	QNB0100-002	CAR ANT JACK		
J321	QNN0490-001	PIN JACK		
J321	QNN0489-001	PIN JACK		
J321	QNN0519-001	PIN JACK		
J801	QNZ0095-001	CONNECTOR		
S701	QSW0451-001	DETECT SW		
S702	QSW0451-001	DETECT SW		
△ TU1	QSW1049-001Z	TACT SW		AR470J G420J G524UI G525U G525UH G525UN G525UT
X31	QAX0616-001Z	CRYSTAL	10.250MHz	
X701	QAX0617-001Z	CRYSTAL	12.500MHz	
X702	QAX0401-001	CRYSTAL	32.768KHz	

Main board (KD-G521)

Block No. [0][2]

△ Symbol No.	Part No.	Part Name	Description	Local
IC31	TB2118F-X	PLL IC		
IC71	SAA6579T-X	IC		
IC161	TDA7404D-E-X	IC		
△ IC301	TB2904HQ	IC		
IC401	TC94A34FG-002	IC		
IC431	SN74AHCT1G04K-X	IC		
IC461	NJU7772F15-X	IC		
IC481	AK4385ET-X	IC		
IC501	LA6242H-X	IC		
IC521	TA2157FN-X	RF AMP IC		
IC541	TC94A14FA	IC		
IC581	NJM4580M-X	IC		
△ IC701	UPD784217AGC347	IC		
IC702	S-80833CNNB-G-W	IC		
IC771	BR24L32F-W-X	IC		
IC801	SN74AHC126NS-X	IC		
△ IC901	R2S25400DS-E	REGULATOR IC		
Q1	2SC3928A/QR/-X	TRANSISTOR		
Q2	2SC3928A/QR/-X	TRANSISTOR		
Q3	RT1P141C-X	DIGI TRANSISTOR		
Q5	2SA1530A/R/-X	TRANSISTOR		
Q6	2SA1365/F/-X	TRANSISTOR		
Q7	RT1N141C-X	DIGI TRANSISTOR		
Q10	RT1N141C-X	DIGI TRANSISTOR		
Q31	RT1N141C-X	DIGI TRANSISTOR		
Q51	2SC3928A/QR/-X	TRANSISTOR		
Q52	2SC3928A/QR/-X	TRANSISTOR		
Q53	RT1N141C-X	DIGI TRANSISTOR		
Q81	2SC3928A/QR/-X	TRANSISTOR		
Q84	RT1P141C-X	DIGI TRANSISTOR		
Q91	2SC3928A/QR/-X	TRANSISTOR		
Q241	2SC3928A/QR/-X	TRANSISTOR		
Q341	KTD1304-X	TRANSISTOR		
Q351	KTD1304-X	TRANSISTOR		
Q440	RT1N141C-X	DIGI TRANSISTOR		
Q501	2SB1322/RS/-T	TRANSISTOR		
Q502	2SB1132/QR/-W	TRANSISTOR		
Q521	2SB1241/QR/-T	TRANSISTOR		
Q541	RT1P141C-X	DIGI TRANSISTOR		
Q542	RT1N141C-X	DIGI TRANSISTOR		
Q543	RT1P141C-X	DIGI TRANSISTOR		
Q544	2SA1365/F/-X	TRANSISTOR		
Q545	RT1N141C-X	DIGI TRANSISTOR		
Q781	RT1P141C-X	DIGI TRANSISTOR		
Q782	KTD1304-X	TRANSISTOR		
Q784	RT1P141C-X	DIGI TRANSISTOR		
Q881	RT1N141C-X	DIGI TRANSISTOR		
Q891	RT1N141C-X	DIGI TRANSISTOR		
Q976	RT1N141C-X	DIGI TRANSISTOR		
Q977	2SA1530A/QR/-X	TRANSISTOR		
D1	1SS355W-X	DIODE C.M		
D2	1SS355W-X	DIODE C.M		
D4	1SS355W-X	DIODE C.M		
D5	1SS355W-X	DIODE C.M		
D84	1SS355W-X	DIODE C.M		
D242	1SS355W-X	DIODE C.M		
D243	CRS03-W	SB DIODE		
D244	UDZW5.1B-X	SI DIODE		
D341	1SS355W-X	DIODE C.M		
D351	1SS355W-X	DIODE C.M		
D481	UDZW5.1B-X	SI DIODE		
D701	UDZW6.2B-X	SI DIODE		
D702	UDZW6.2B-X	SI DIODE		
D703	UDZW6.2B-X	SI DIODE		
D704	UDZW6.2B-X	SI DIODE		
D705	UDZW6.2B-X	SI DIODE		
D706	UDZW6.2B-X	SI DIODE		
D707	UDZW6.2B-X	SI DIODE		
D708	UDZW6.2B-X	SI DIODE		
D709	UDZW6.2B-X	SI DIODE		
D710	UDZW5.6B-X	Z DIODE		
D711	UDZW5.6B-X	Z DIODE		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
D712	UDZW6.2B-X	SI DIODE			C171	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D713	1SS355W-X	DIODE C.M			C172	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D714	UDZW5.6B-X	Z DIODE			C173	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D715	SML-310VT/JK-X	LED			C174	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
D716	SML-310VT/JK-X	LED			C175	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
D717	SML-310VT/JK-X	LED			C176	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
D718	UDZW5.6B-X	Z DIODE			C179	QTE1E57-475Z	E CAPACITOR	4.7uF 25V	
D719	UDZW5.6B-X	Z DIODE			C180	QTE1E57-475Z	E CAPACITOR	4.7uF 25V	
D720	UDZW6.2B-X	SI DIODE			C181	QTE1H57-105Z	E CAPACITOR	1uF 50V	
D781	1SS355W-X	DIODE C.M			C182	QTE1H55-225Z	E CAPACITOR	2.2uF 50V	
D782	1SS355W-X	DIODE C.M			C183	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D784	UDZW11B-X	Z DIODE			C241	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D891	1SS355W-X	DIODE C.M			C242	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
D892	1SS355W-X	DIODE C.M			C243	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
△ D901	1N5401-F64	DIODE			C245	NCB21CK-224X	C CAPACITOR	0.22uF 16V K	
D902	1SS355W-X	DIODE C.M			C246	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
D971	CRS03-W	SB DIODE			C301	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
D972	CRS03-W	SB DIODE			C302	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
D995	CRS03-W	SB DIODE			C303	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D998	CRS03-W	SB DIODE			C304	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
					C307	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C1	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M		C311	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C2	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C312	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C3	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M		C313	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C4	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M		C314	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C5	QEKJ1HM-104Z	E CAPACITOR	0.1uF 50V M		C315	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C6	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C316	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C9	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M		C317	QTE1C57-476Z	E CAPACITOR	47uF 16V	
C31	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C318	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C32	NDC31HJ-470X	C CAPACITOR	47pF 50V J		C319	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C33	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		C320	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C34	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C321	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C35	NDC31HJ-100X	C CAPACITOR	10pF 50V J		C322	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C36	NDC31HJ-7R0X	C CAPACITOR	7pF 50V J		C323	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C37	NDC31HJ-100X	C CAPACITOR	10pF 50V J		C324	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C38	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C325	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C39	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C341	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C40	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M		C402	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C41	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C403	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C42	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C404	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C43	QFV61HJ-473Z	MF CAPACITOR	0.047uF 50V J		C405	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C44	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C407	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C45	NCB31HK-272X	C CAPACITOR	2700pF 50V K		C408	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C46	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C409	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C47	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C411	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C48	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C412	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C49	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C413	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C50	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C414	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
C51	NDC31HJ-331X	C CAPACITOR	330pF 50V J		C415	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C52	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C416	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C53	NCB31EK-472X	C CAPACITOR	4700pF 25V K		C418	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C54	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C419	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C55	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M		C420	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C71	NDC31HJ-561X	C CAPACITOR	560pF 50V J		C421	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C72	NCB31EK-223X	C CAPACITOR	0.022uF 25V K		C422	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C73	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M		C430	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C74	NDC31HJ-820X	C CAPACITOR	82pF 50V J		C440	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C75	NDC31HJ-470X	C CAPACITOR	47pF 50V J		C461	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C76	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C462	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C77	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		C463	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C78	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C464	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C81	QTE1H57-105Z	E CAPACITOR	1uF 50V		C481	QTE1C57-476Z	E CAPACITOR	47uF 16V	
C82	NCB31HK-182X	C CAPACITOR	1800pF 50V K		C482	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C83	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C483	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C84	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C501	QEDJ1AM-476Z	E CAPACITOR	47uF 10V M	
C85	NCB31HK-392X	C CAPACITOR	3900pF 50V K		C502	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C91	QTE1H57-105Z	E CAPACITOR	1uF 50V		C503	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C92	NCB31HK-182X	C CAPACITOR	1800pF 50V K		C504	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C94	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C505	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C95	NCB31HK-392X	C CAPACITOR	3900pF 50V K		C506	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C161	QTE1H57-105Z	E CAPACITOR	1uF 50V		C507	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C162	QTE1H55-225Z	E CAPACITOR	2.2uF 50V		C508	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C163	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C510	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C166	QTE1C57-476Z	E CAPACITOR	47uF 16V		C512	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C167	NCB31HK-472X	C CAPACITOR	4700pF 50V K		C513	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C168	QTE1A57-107Z	E CAPACITOR	100uF 10V		C521	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C169	QTE1E57-475Z	E CAPACITOR	4.7uF 25V		C522	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C170	QTE1E57-475Z	E CAPACITOR	4.7uF 25V		C523	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C524	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C801	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C525	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C881	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C527	NCB31HK-682X	C CAPACITOR	6800pF 50V K		C891	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C528	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C901	QEZ0722-338	E CAPACITOR	3300uF	
C529	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C902	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C530	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C903	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C531	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C904	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C532	NDC31HJ-680X	C CAPACITOR	68pF 50V J		C905	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C533	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C906	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C534	NDC31HJ-5R0X	C CAPACITOR	5pF 50V J		C907	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C541	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C908	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C542	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C909	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C543	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C910	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C544	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		C911	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C545	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C912	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C546	NDC31HJ-470X	C CAPACITOR	47pF 50V J		C913	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C547	NCB31HK-153X	C CAPACITOR	0.015uF 50V K		C914	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C548	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C915	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C549	NCB31HK-272X	C CAPACITOR	2700pF 50V K		C961	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C550	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C962	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C551	NCB31EK-333X	C CAPACITOR	0.033uF 25V K		C963	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C552	NCB31EK-333X	C CAPACITOR	0.033uF 25V K		C964	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C553	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C965	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C554	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C966	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C555	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C967	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C556	NCB31HK-471X	C CAPACITOR	470pF 50V K		C968	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C557	NCB31HK-471X	C CAPACITOR	470pF 50V K		C971	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C558	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C990	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C559	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C991	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C560	NCB31HK-103X	C CAPACITOR	0.01uF 50V K						
C561	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		R1	NRSA181J-100X	MG RESISTOR	10Ω 1/8W J	
C562	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R2	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C565	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R3	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C566	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		R4	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
C568	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R5	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C569	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R6	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C570	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		R7	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C571	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R9	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C572	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		R10	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C580	QTE1E57-475Z	E CAPACITOR	4.7uF 25V		R11	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C581	NCB31HK-332X	C CAPACITOR	3300pF 50V K		R31	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
C582	NDC31HJ-271X	C CAPACITOR	270pF 50V J		R32	NRSA63J-622X	MG RESISTOR	6.2kΩ 1/16W J	
C583	NDC31HJ-271X	C CAPACITOR	270pF 50V J		R33	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C584	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R38	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C585	QTE0J57-476Z	E CAPACITOR	47uF 6.3V		R39	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C589	QTE1E57-475Z	E CAPACITOR	4.7uF 25V		R40	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
C590	QTE1E57-475Z	E CAPACITOR	4.7uF 25V		R41	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C591	NCB31HK-332X	C CAPACITOR	3300pF 50V K		R42	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
C592	NDC31HJ-271X	C CAPACITOR	270pF 50V J		R43	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C593	NDC31HJ-271X	C CAPACITOR	270pF 50V J		R44	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
C594	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R51	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
C595	QTE0J57-476Z	E CAPACITOR	47uF 6.3V		R52	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C596	QTE1A57-107Z	E CAPACITOR	100uF 10V		R53	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C597	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R54	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C599	QTE1E57-475Z	E CAPACITOR	4.7uF 25V		R55	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C701	NDC31HJ-220X	C CAPACITOR	22pF 50V J		R56	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C702	NDC31HJ-270X	C CAPACITOR	27pF 50V J		R57	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
C703	NDC31HJ-270X	C CAPACITOR	27pF 50V J		R58	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C704	NDC31HJ-8R0X	C CAPACITOR	8pF 50V J		R59	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C705	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R71	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C706	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R72	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C707	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R73	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C708	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R74	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
C709	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R81	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
C710	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		R82	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
C711	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M		R83	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C712	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R84	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C713	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R91	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
C715	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R92	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
C716	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R93	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C717	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R169	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C718	NDC31HJ-101X	C CAPACITOR	100pF 50V J		R170	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C724	NCB31AK-334X	C CAPACITOR	0.33uF 10V K		R171	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
C771	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R172	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
C781	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		R175	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C782	NCB31EK-823X	C CAPACITOR	0.082uF 25V K		R176	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C783	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R177	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
C784	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M		R178	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R179	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R531	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R180	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R532	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R187	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J		R533	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R188	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J		R534	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R189	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J		R535	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R241	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R536	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R242	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R537	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R243	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J		R539	NRSA02J-151X	MG RESISTOR	150Ω 1/10W J	
R244	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J		R541	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R245	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R542	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R246	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R543	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R247	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J		R544	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R248	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R545	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R301	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R546	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R302	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R547	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R303	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R548	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R304	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R549	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R311	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R550	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R312	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R551	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R313	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R552	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R314	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R553	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R341	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R558	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R342	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R559	NRSA63J-155X	MG RESISTOR	1.5MΩ 1/16W J	
R343	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		R581	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R351	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R582	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R352	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R583	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R353	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		R584	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R402	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R585	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R403	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J		R586	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R404	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R587	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R405	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R588	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R406	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R591	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R407	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R592	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R408	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R593	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R409	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R594	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R412	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R595	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R413	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R596	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R414	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R597	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R415	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R598	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R416	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R701	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R423	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R702	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R424	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R704	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R440	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R705	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R451	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R708	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R452	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R713	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R453	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R714	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R454	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R715	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R455	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R716	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R456	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R717	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R457	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R718	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R458	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R719	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R459	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		R720	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R460	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		R721	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R481	NRSA02J-181X	MG RESISTOR	180Ω 1/10W J		R722	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R501	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		R723	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R502	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		R725	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R503	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R726	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R504	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J		R728	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R507	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		R729	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R508	NRSA63J-302X	MG RESISTOR	3kΩ 1/16W J		R730	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R509	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J		R731	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R510	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		R732	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R511	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R734	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R512	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R735	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R513	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R736	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R514	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J		R737	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R515	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J		R738	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R516	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J		R739	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R517	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J		R740	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R518	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		R741	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R523	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J		R742	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R524	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J		R743	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R525	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J		R744	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R526	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J		R745	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R527	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J		R746	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R528	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J		R747	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R529	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J		R748	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R530	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J		R749	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local
R750	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R751	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R752	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R753	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R754	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R755	NRSA63J-106X	MG RESISTOR	10MΩ 1/16W J	
R756	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R757	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R758	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R760	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R763	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R764	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R766	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R767	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R768	NRSA02J-271X	MG RESISTOR	270Ω 1/10W J	
R771	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R772	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R774	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R775	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R776	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R777	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R781	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R782	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R783	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R793	NRS181J-0R0X	MG RESISTOR	0Ω 1/8W J	
R801	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R802	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R803	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R804	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R805	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R806	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R807	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R808	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R809	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R810	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R881	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R882	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R891	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R892	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R901	QRE142J-102X	C RESISTOR	1kΩ 1/4W J	
R902	NRSA02J-912X	MG RESISTOR	9.1kΩ 1/10W J	
R903	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	
R971	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R972	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R976	NRSA02J-273X	MG RESISTOR	27kΩ 1/10W J	
R977	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
RA30	NRZ0065-222X	NET RESISTOR	2.2kΩ	
RA550	NRZ0065-103X	NET RESISTOR	10kΩ	
RA701	NRZ0065-102X	MG RESISTOR	1kΩ	
L1	QQL244J-4R7Z	COIL	4.7uH J	
L401	NQL114K-470X	INDUCTOR	47uH K	
L402	NQL114K-470X	INDUCTOR	47uH K	
L404	NQL114K-470X	INDUCTOR	47uH K	
L541	QQL244J-470Z	COIL	47uH J	
L543	QQL244J-470Z	COIL	47uH J	
L544	QQL244J-470Z	COIL	47uH J	
L701	NQL114M-4R7X	COIL	4.7uH M	
L702	QQL244J-4R7Z	COIL	4.7uH J	
L710	NQR0007-002X	FERRITE BEADS		
L711	NQR0007-002X	FERRITE BEADS		
L712	NQR0007-002X	FERRITE BEADS		
L901	QQR1378-002	COIL		
CN501	QGB2027M4-22S	CONNECTOR	B-B (1-22)	
CN701	QNZ0605-001	CAR CONNECTOR		
CN702	QGA2006F1-02	CONNECTOR	W-B (1-2)	
CN901	QNZ0859-001	CAR CONNECTOR		
J1	QNB0190-001	CAR ANT JACK		
J321	QNN0519-001	PIN JACK		
J801	QNZ0095-001	CONNECTOR		
PP1	QZW0010-001	STYLE PIN		
S701	QSW0451-001	DETECT SW		
S702	QSW0451-001	DETECT SW		
S703	QSW1049-001Z	TACT SW		
△ TU1	QAU0313-001	TUNER		
X31	QAX0616-001Z	CRYSTAL	10.250MHz	
X71	QAX0263-001Z	CRYSTAL	4.332MHz	

△ Symbol No.	Part No.	Part Name	Description	Local
X401	QAX0760-001Z	CRYSTAL		
X701	QAX0777-001Z	CRYSTAL		
X702	QAX0401-001	CRYSTAL	32.768KHz	

Main board (KD-G527)

Block No. [0][3]

△ Symbol No.	Part No.	Part Name	Description	Local
IC31	TB2118F-X	PLL IC		
IC71	SAA6579T-X	IC		
IC161	TDA7404D-E-X	IC		
△ IC301	TB2904HQ	IC		
IC401	TC94A34FG-002	IC		
IC431	SN74AHCT1G04K-X	IC		
IC461	NJU7772F15-X	IC		
IC481	AK4385ET-X	IC		
IC501	LA6242H-X	IC		
IC521	TA2157FN-X	RF AMP IC		
IC541	TC94A14FA	IC		
IC581	NJM4580M-X	IC		
△ IC701	UPD784217AGC347	IC		
IC702	S-80833CNNB-G-W	IC		
IC771	BR24L32F-W-X	IC		
IC801	SN74AHC126NS-X	IC		
△ IC901	R2S25400DS-E	REGULATOR IC		
Q1	2SC3928A/QR/-X	TRANSISTOR		
Q2	2SC3928A/QR/-X	TRANSISTOR		
Q3	RT1P141C-X	DIGI TRANSISTOR		
Q5	2SA1530A/R/-X	TRANSISTOR		
Q6	2SA1365/F/-X	TRANSISTOR		
Q7	RT1N141C-X	DIGI TRANSISTOR		
Q10	RT1N141C-X	DIGI TRANSISTOR		
Q31	RT1N141C-X	DIGI TRANSISTOR		
Q51	2SC3928A/QR/-X	TRANSISTOR		
Q52	2SC3928A/QR/-X	TRANSISTOR		
Q53	RT1N141C-X	DIGI TRANSISTOR		
Q81	2SC3928A/QR/-X	TRANSISTOR		
Q84	RT1P141C-X	DIGI TRANSISTOR		
Q91	2SC3928A/QR/-X	TRANSISTOR		
Q241	2SC3928A/QR/-X	TRANSISTOR		
Q341	KTD1304-X	TRANSISTOR		
Q351	KTD1304-X	TRANSISTOR		
Q440	RT1N141C-X	DIGI TRANSISTOR		
Q501	2SB1322/RS-T	TRANSISTOR		
Q502	2SB1132/QR-W	TRANSISTOR		
Q521	2SB1241/QR-T	TRANSISTOR		
Q541	RT1P141C-X	DIGI TRANSISTOR		
Q542	RT1N141C-X	DIGI TRANSISTOR		
Q543	RT1P141C-X	DIGI TRANSISTOR		
Q544	2SA1365/F/-X	TRANSISTOR		
Q545	RT1N141C-X	DIGI TRANSISTOR		
Q781	RT1P141C-X	DIGI TRANSISTOR		
Q782	KTD1304-X	TRANSISTOR		
Q784	RT1P141C-X	DIGI TRANSISTOR		
Q881	RT1N141C-X	DIGI TRANSISTOR		
Q891	RT1N141C-X	DIGI TRANSISTOR		
Q976	RT1N141C-X	DIGI TRANSISTOR		
Q977	2SA1530A/QR/-X	TRANSISTOR		
D1	1SS355W-X	DIODE C.M		
D2	1SS355W-X	DIODE C.M		
D4	1SS355W-X	DIODE C.M		
D5	1SS355W-X	DIODE C.M		
D84	1SS355W-X	DIODE C.M		
D242	1SS355W-X	DIODE C.M		
D243	CRS03-W	SB DIODE		
D244	UDZW5.1B-X	SI DIODE		
D341	1SS355W-X	DIODE C.M		
D351	1SS355W-X	DIODE C.M		
D481	UDZW5.1B-X	SI DIODE		
D701	UDZW6.2B-X	SI DIODE		
D702	UDZW6.2B-X	SI DIODE		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
D703	UDZW6.2B-X	SI DIODE			C161	QTE1H57-105Z	E CAPACITOR	1uF 50V	
D704	UDZW6.2B-X	SI DIODE			C162	QTE1H55-225Z	E CAPACITOR	2.2uF 50V	
D705	UDZW6.2B-X	SI DIODE			C163	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D706	UDZW6.2B-X	SI DIODE			C166	QTE1C57-476Z	E CAPACITOR	47uF 16V	
D707	UDZW6.2B-X	SI DIODE			C167	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
D708	UDZW6.2B-X	SI DIODE			C168	QTE1A57-107Z	E CAPACITOR	100uF 10V	
D709	UDZW6.2B-X	SI DIODE			C169	QTE1E57-475Z	E CAPACITOR	4.7uF 25V	
D710	UDZW5.6B-X	Z DIODE			C170	QTE1E57-475Z	E CAPACITOR	4.7uF 25V	
D711	UDZW5.6B-X	Z DIODE			C171	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D713	1SS355W-X	DIODE C.M			C172	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D714	UDZW5.6B-X	Z DIODE			C173	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D715	SML-310VT/JK/-X	LED			C174	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
D716	SML-310VT/JK/-X	LED			C175	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
D717	SML-310VT/JK/-X	LED			C176	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
D718	UDZW5.6B-X	Z DIODE			C179	QTE1E57-475Z	E CAPACITOR	4.7uF 25V	
D719	UDZW5.6B-X	Z DIODE			C180	QTE1E57-475Z	E CAPACITOR	4.7uF 25V	
D720	UDZW6.2B-X	SI DIODE			C181	QTE1H57-105Z	E CAPACITOR	1uF 50V	
D781	1SS355W-X	DIODE C.M			C182	QTE1H55-225Z	E CAPACITOR	2.2uF 50V	
D782	1SS355W-X	DIODE C.M			C183	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D784	UDZW11B-X	Z DIODE			C241	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D891	1SS355W-X	DIODE C.M			C242	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
△ D901	1N5401-F64	DIODE			C243	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
D902	1SS355W-X	DIODE C.M			C245	NCB21CK-224X	C CAPACITOR	0.22uF 16V K	
D971	CRS03-W	SB DIODE			C246	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
D972	CRS03-W	SB DIODE			C301	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
D995	CRS03-W	SB DIODE			C302	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
D998	CRS03-W	SB DIODE			C303	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
					C304	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
					C307	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C1	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M		C311	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C2	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C312	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C3	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M		C313	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C4	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M		C314	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C5	QEKJ1HM-104Z	E CAPACITOR	0.1uF 50V M		C315	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C6	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C316	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C9	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M		C317	QTE1C57-476Z	E CAPACITOR	47uF 16V	
C31	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C318	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C32	NDC31HJ-470X	C CAPACITOR	47pF 50V J		C319	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C33	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		C320	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C34	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C321	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C35	NDC31HJ-100X	C CAPACITOR	10pF 50V J		C322	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C36	NDC31HJ-7R0X	C CAPACITOR	7pF 50V J		C323	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C37	NDC31HJ-100X	C CAPACITOR	10pF 50V J		C324	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C38	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C325	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C39	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C341	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C40	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M		C402	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C41	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C403	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C42	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C404	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C43	QFV61HJ-473Z	MF CAPACITOR	0.047uF 50V J		C405	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C44	NCB31HK-333X	C CAPACITOR	0.033uF 50V K		C407	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C45	NCB31HK-682X	C CAPACITOR	6800pF 50V K		C408	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C46	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C409	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C47	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C411	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C48	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C412	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C49	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C413	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C50	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C414	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
C51	NDC31HJ-331X	C CAPACITOR	330pF 50V J		C415	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C52	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C416	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C53	NCB31EK-472X	C CAPACITOR	4700pF 25V K		C418	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C54	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C419	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C55	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M		C420	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C71	NDC31HJ-561X	C CAPACITOR	560pF 50V J		C421	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C72	NCB31EK-223X	C CAPACITOR	0.022uF 25V K		C422	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C73	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M		C430	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C74	NDC31HJ-820X	C CAPACITOR	82pF 50V J		C440	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C75	NDC31HJ-470X	C CAPACITOR	47pF 50V J		C461	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C76	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C462	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C77	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		C463	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C78	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C464	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C81	QTE1H57-105Z	E CAPACITOR	1uF 50V		C481	QTE1C57-476Z	E CAPACITOR	47uF 16V	
C82	NCB31HK-182X	C CAPACITOR	1800pF 50V K		C482	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C83	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C483	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C84	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C501	QEDJ1AM-476Z	E CAPACITOR	47uF 10V M	
C85	NCB31HK-392X	C CAPACITOR	3900pF 50V K		C502	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C91	QTE1H57-105Z	E CAPACITOR	1uF 50V		C503	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C92	NCB31HK-182X	C CAPACITOR	1800pF 50V K		C504	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C94	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C505	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C95	NCB31HK-392X	C CAPACITOR	3900pF 50V K		C506	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C507	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C717	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C508	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C724	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C510	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C771	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C512	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C781	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C513	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C782	NCB31EK-823X	C CAPACITOR	0.082uF 25V K	
C521	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C783	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C522	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C784	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C523	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C801	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C524	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C881	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C525	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C891	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C527	NCB31HK-682X	C CAPACITOR	6800pF 50V K		C901	QEZ0722-338	E CAPACITOR	3300uF	
C528	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C902	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C529	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C903	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C530	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C904	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C531	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C905	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C532	NDC31HJ-680X	C CAPACITOR	68pF 50V J		C906	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C533	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C907	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C534	NDC31HJ-5R0X	C CAPACITOR	5pF 50V J		C908	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C541	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C909	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C542	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C910	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C543	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C911	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C544	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		C912	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C545	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C913	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C546	NDC31HJ-470X	C CAPACITOR	47pF 50V J		C914	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C547	NCB31HK-153X	C CAPACITOR	0.015uF 50V K		C915	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C548	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C961	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C549	NCB31HK-272X	C CAPACITOR	2700pF 50V K		C962	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C550	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C963	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C551	NCB31EK-333X	C CAPACITOR	0.033uF 25V K		C964	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C552	NCB31EK-333X	C CAPACITOR	0.033uF 25V K		C965	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C553	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C966	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C554	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C967	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C555	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C968	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C556	NCB31HK-471X	C CAPACITOR	470pF 50V K		C971	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C557	NCB31HK-471X	C CAPACITOR	470pF 50V K		C990	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C558	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C991	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C559	NCB31EK-473X	C CAPACITOR	0.047uF 25V K						
C560	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R1	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
C561	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		R2	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C562	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R3	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C565	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R4	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
C566	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		R5	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C568	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R6	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C569	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R7	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C570	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		R9	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
C571	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R10	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C572	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		R11	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C580	QTE1E57-475Z	E CAPACITOR	4.7uF 25V		R31	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
C581	NCB31HK-332X	C CAPACITOR	3300pF 50V K		R32	NRSA63J-622X	MG RESISTOR	6.2kΩ 1/16W J	
C582	NDC31HJ-271X	C CAPACITOR	270pF 50V J		R33	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C583	NDC31HJ-271X	C CAPACITOR	270pF 50V J		R38	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C584	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R39	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C585	QTE0J57-476Z	E CAPACITOR	47uF 6.3V		R40	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
C589	QTE1E57-475Z	E CAPACITOR	4.7uF 25V		R41	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
C590	QTE1E57-475Z	E CAPACITOR	4.7uF 25V		R42	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
C591	NCB31HK-332X	C CAPACITOR	3300pF 50V K		R43	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C592	NDC31HJ-271X	C CAPACITOR	270pF 50V J		R44	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
C593	NDC31HJ-271X	C CAPACITOR	270pF 50V J		R51	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
C594	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R52	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C595	QTE0J57-476Z	E CAPACITOR	47uF 6.3V		R53	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C596	QTE1A57-107Z	E CAPACITOR	100uF 10V		R54	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C597	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R55	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C599	QTE1E57-475Z	E CAPACITOR	4.7uF 25V		R56	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C701	NDC31HJ-220X	C CAPACITOR	22pF 50V J		R57	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
C702	NDC31HJ-270X	C CAPACITOR	27pF 50V J		R58	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C703	NDC31HJ-270X	C CAPACITOR	27pF 50V J		R59	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C704	NDC31HJ-8R0X	C CAPACITOR	8pF 50V J		R71	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C705	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R72	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C706	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R73	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C707	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R74	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
C708	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R81	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
C709	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R82	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
C710	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		R83	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C711	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M		R84	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C712	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R91	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
C713	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R92	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
C715	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R93	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C716	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R169	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R170	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R524	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R171	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		R525	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R172	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		R526	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R175	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R527	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R176	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R528	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R177	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J		R529	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R178	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R530	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R179	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R531	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R180	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R532	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R187	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J		R533	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R188	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J		R534	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R189	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J		R535	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R241	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R536	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R242	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R537	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R243	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J		R539	NRSA02J-151X	MG RESISTOR	150Ω 1/10W J	
R244	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J		R541	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R245	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R542	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R246	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R543	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R247	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J		R544	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R248	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R545	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R301	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R546	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R302	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R547	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R303	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R548	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R304	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R549	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R311	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R550	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R312	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R551	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R313	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R552	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R314	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R553	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R341	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R558	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R342	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R559	NRSA63J-155X	MG RESISTOR	1.5MΩ 1/16W J	
R343	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		R581	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R351	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R582	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R352	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R583	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R353	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		R584	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R402	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R585	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R403	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J		R586	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R404	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R587	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R405	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R588	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R406	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R591	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R407	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R592	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R408	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R593	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R409	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R594	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R412	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R595	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R413	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R596	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R414	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R597	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R415	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R598	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R416	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R701	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R423	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R702	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R424	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R704	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R440	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R705	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R451	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R708	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R452	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R713	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R453	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R714	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R454	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R715	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R455	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R716	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R456	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R717	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R457	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R718	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R458	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R719	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R459	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		R720	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R460	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		R721	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R481	NRSA02J-181X	MG RESISTOR	180Ω 1/10W J		R722	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R501	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		R723	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R502	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		R725	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R503	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R726	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R504	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J		R728	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R507	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		R729	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R508	NRSA63J-302X	MG RESISTOR	3kΩ 1/16W J		R730	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R509	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J		R731	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R510	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		R732	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R511	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R734	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R512	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R735	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R513	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R736	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R514	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J		R737	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R515	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J		R738	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R516	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J		R739	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R517	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J		R740	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R518	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		R741	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R523	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J		R742	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local
R743	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R744	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R745	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R746	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R747	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R748	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R749	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R750	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R751	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R752	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R753	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R754	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R755	NRSA63J-106X	MG RESISTOR	10MΩ 1/16W J	
R756	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R757	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R758	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R759	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R763	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R764	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R768	NRSA02J-271X	MG RESISTOR	270Ω 1/10W J	
R771	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R772	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R774	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R775	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R776	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R777	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R781	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R782	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R783	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R793	NRS181J-0R0X	MG RESISTOR	0Ω 1/8W J	
R801	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R802	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R803	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R804	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R805	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R806	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R807	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R808	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R809	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R810	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R881	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R882	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R891	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R892	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R901	QRE142J-102X	C RESISTOR	1kΩ 1/4W J	
R902	NRSA02J-912X	MG RESISTOR	9.1kΩ 1/10W J	
R903	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	
R971	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R972	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R976	NRSA02J-273X	MG RESISTOR	27kΩ 1/10W J	
R977	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
RA30	NRZ0065-222X	NET RESISTOR	2.2kΩ	
RA550	NRZ0065-103X	NET RESISTOR	10kΩ	
RA701	NRZ0065-102X	MG RESISTOR	1kΩ	
L1	QQL244J-4R7Z	COIL	4.7uH J	
L401	NQL114K-470X	INDUCTOR	47uH K	
L402	NQL114K-470X	INDUCTOR	47uH K	
L404	NQL114K-470X	INDUCTOR	47uH K	
L541	QQL244J-470Z	COIL	47uH J	
L543	QQL244J-470Z	COIL	47uH J	
L544	QQL244J-470Z	COIL	47uH J	
L701	NQL114M-4R7X	COIL	4.7uH M	
L702	QQL244J-4R7Z	COIL	4.7uH J	
L710	NQR0007-002X	FERRITE BEADS		
L711	NQR0007-002X	FERRITE BEADS		
L712	NQR0007-002X	FERRITE BEADS		
L901	QQR1378-002	COIL		
CN501	QGB2027M4-22S	CONNECTOR	B-B (1-22)	
CN701	QNZ0605-001	CAR CONNECTOR		
CN901	QNZ0859-001	CAR CONNECTOR		
J1	QNB0190-001	CAR ANT JACK		
J321	QNN0519-001	PIN JACK		
J801	QNZ0095-001	CONNECTOR		
S701	QSW0451-001	DETECT SW		
S702	QSW0451-001	DETECT SW		
S703	QSW1049-001Z	TACT SW		

△ Symbol No.	Part No.	Part Name	Description	Local
△ TU1	QAU0314-001	TUNER		
X31	QAX0616-001Z	CRYSTAL	10.250MHz	
X71	QAX0263-001Z	CRYSTAL	4.332MHz	
X401	QAX0760-001Z	CRYSTAL		
X701	QAX0777-001Z	CRYSTAL		
X702	QAX0401-001	CRYSTAL	32.768KHz	

Switch board (KD-AR470/G420/G524/G525)

Block No. [0][4]

△ Symbol No.	Part No.	Part Name	Description	Local
IC601	PT6523LQ-L	LCD DRIVER		
IC602	RPM7338-V4	RM.RECEIVER		
Q640	2SA1365/F/-X	TRANSISTOR		
Q641	RT1N141C-X	DIGI TRANSISTOR		
D601	SML-310VT/JK/-X	LED		
D602	SML-310VT/JK/-X	LED		
D603	SML-310VT/JK/-X	LED		
D604	SML-310VT/JK/-X	LED		
D605	SML-310VT/JK/-X	LED		
D606	SML-310VT/JK/-X	LED		
D607	SML-310VT/JK/-X	LED		
D608	SML-310VT/JK/-X	LED		
D609	SML-310VT/JK/-X	LED		
D610	SML-310VT/JK/-X	LED		
D611	SML-310VT/JK/-X	LED		
D612	SML-310VT/JK/-X	LED		
D613	SML-310VT/JK/-X	LED		
D614	SML-310VT/JK/-X	LED		
D615	SML-310VT/JK/-X	LED		
D616	SML-310VT/JK/-X	LED		
D617	SML-310VT/JK/-X	LED		
D618	SML-310VT/JK/-X	LED		
D619	SML-310VT/JK/-X	LED		
D640	MC2838-X	DIODE		
D641	UDZW5.1B-X	SI DIODE		
D642	1SS355W-X	DIODE C.M		
D643	UDZW6.2B-X	SI DIODE		
D645	NSPW310BS/B2RST	LED		AR470J G420J G521E G521EU G521EX G521EY G524UI G525U G525UH G525UN G525UT G527EE
D646	NSPW310BS/BRST/	WHITE LED		
D646	NSPW310BS/BRST/	WHITE LED		
C601	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C602	NCS31HJ-681X	C CAPACITOR	680pF 50V J	
C603	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C611	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	
C612	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
R601	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R602	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R603	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R604	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R605	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R606	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R607	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R608	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	

CD mechanism control board (KD-AR470/G420/G524/G525)

Block No. [0][5]

△ Symbol No.	Part No.	Part Name	Description	Local
△ IC501	TMP91CW12AF5VD9	IC		
IC502	BR24L01AFV-W-X	IC		
IC503	SN74AHCT126PW-X	IC(DIGITAL)		
IC504	NJU7241F33-X	IC		
IC571	PCM1753-X	IC		
IC572	NJM4580V-X	IC		
IC573	SN74AHC04PW-X	IC		
IC601	TA2157FN-X	RF AMP IC		
△ IC621	TC94A14FA	IC		
IC651	NJU7772F15-X	IC		
△ IC652	TC94A34FG-002	IC		
△ IC681	BA5830FP-X	IC		
Q501	RT1P141C-X	DIGI TRANSISTOR		
Q502	RT1N141C-X	DIGI TRANSISTOR		
Q571	RT1P141C-X	DIGI TRANSISTOR		
Q572	RT1N141C-X	DIGI TRANSISTOR		
Q573	2SA1365/F/-X	TRANSISTOR		
Q574	RT1N141C-X	DIGI TRANSISTOR		
Q601	2SB1132/QR/-W	TRANSISTOR		
Q651	2SA1365/F/-X	TRANSISTOR		
Q652	RT1N141C-X	DIGI TRANSISTOR		
Q681	2SB1184/QR/-X	TRANSISTOR		
D506	1SS355W-X	DIODE C.M		
D682	1SR154-400-X	DIODE		
C501	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C502	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C503	NEAG0JM-107X	E CAPACITOR	100uF 6.3V M	
C504	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
C505	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
C506	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C507	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C508	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C509	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C510	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C511	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C512	NEAG0JM-107X	E CAPACITOR	100uF 6.3V M	
C513	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C514	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C551	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C561	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	
C571	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C572	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C573	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C574	NEAG0JM-107X	E CAPACITOR	100uF 6.3V M	
C575	NEAG0JM-107X	E CAPACITOR	100uF 6.3V M	
C577	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C578	NEAG0JM-107X	E CAPACITOR	100uF 6.3V M	
C580	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	
C581	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C582	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C583	NCS31HJ-821X	C CAPACITOR	820pF 50V J	
C584	NCS31HJ-821X	C CAPACITOR	820pF 50V J	
C585	NEAG1VM-475X	E CAPACITOR	4.7uF 35V M	
C586	NEAG1VM-475X	E CAPACITOR	4.7uF 35V M	
C587	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C588	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C589	NEAG1VM-475X	E CAPACITOR	4.7uF 35V M	
C590	NEAG1VM-475X	E CAPACITOR	4.7uF 35V M	
C591	NEAG0JM-476X	E CAPACITOR	47uF 6.3V M	
C592	NEAG0JM-476X	E CAPACITOR	47uF 6.3V M	
C593	NEAG1CM-476X	E CAPACITOR	47uF 16V M	
C594	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C595	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C596	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C597	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C598	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C601	NEAG0JM-476X	E CAPACITOR	47uF 6.3V M	
C602	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C603	NEAG0JM-107X	E CAPACITOR	100uF 6.3V M	

△ Symbol No.	Part No.	Part Name	Description	Local
C604	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C605	NCB31HK-682X	C CAPACITOR	6800pF 50V K	
C606	NEAG0JM-476X	E CAPACITOR	47uF 6.3V M	
C607	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C608	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C609	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C610	NDC31HJ-5R0X	C CAPACITOR	5pF 50V J	
C611	NDC31HJ-680X	C CAPACITOR	68pF 50V J	
C612	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C613	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C614	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C616	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C621	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C622	NEAG0JM-476X	E CAPACITOR	47uF 6.3V M	
C623	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C624	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	
C625	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C626	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C627	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C628	NEAG0JM-476X	E CAPACITOR	47uF 6.3V M	
C629	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C630	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C631	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C632	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C633	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C634	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C635	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C636	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C637	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C638	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C639	NEAG0JM-476X	E CAPACITOR	47uF 6.3V M	
C640	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C641	NEAG0JM-476X	E CAPACITOR	47uF 6.3V M	
C642	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C643	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C644	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C645	NEAG0JM-476X	E CAPACITOR	47uF 6.3V M	
C646	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C651	NEAG0JM-476X	E CAPACITOR	47uF 6.3V M	
C652	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C653	NEAG0JM-476X	E CAPACITOR	47uF 6.3V M	
C654	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C655	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C656	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C659	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C660	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C661	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C662	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C663	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C664	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
C665	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C666	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C667	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C668	NEAG0JM-476X	E CAPACITOR	47uF 6.3V M	
C669	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C682	NEAG1VM-475X	E CAPACITOR	4.7uF 35V M	
C683	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C684	NEAG1CM-476X	E CAPACITOR	47uF 16V M	
C689	NEAG1CM-476X	E CAPACITOR	47uF 16V M	
C690	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C693	NEAG1CM-476X	E CAPACITOR	47uF 16V M	
R501	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R502	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R503	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R504	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R505	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R506	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R507	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R508	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R509	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R510	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R511	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R512	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R513	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R514	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R515	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R516	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local
R517	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R518	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R519	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R520	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R521	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R522	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R523	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R525	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R526	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R528	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R530	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R531	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R532	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R533	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R534	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R535	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R536	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R537	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R539	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R540	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R541	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R542	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R543	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R544	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R545	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R546	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R547	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R548	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R549	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R550	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R551	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R552	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R553	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R554	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R555	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R556	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R557	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R558	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R559	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R560	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R561	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R562	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R563	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R568	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R569	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R570	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R572	NRSA63J-225X	MG RESISTOR	2.2MΩ 1/16W J	
R573	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R574	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R575	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R576	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R577	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R578	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R579	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R581	NRSA63J-243X	MG RESISTOR	24kΩ 1/16W J	
R582	NRSA63J-243X	MG RESISTOR	24kΩ 1/16W J	
R583	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R584	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R585	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R586	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R587	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R588	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R589	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R590	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R591	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R592	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R593	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R594	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R595	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R601	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R602	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R603	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R604	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R605	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R606	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R607	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R608	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R609	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local
R610	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R611	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R612	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R613	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R614	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R615	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	
R616	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R621	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R622	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R623	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R624	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R625	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R626	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R627	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R628	NRSA63J-155X	MG RESISTOR	1.5MΩ 1/16W J	
R629	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R630	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R631	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R632	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R633	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R634	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R635	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R636	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R637	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R638	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R639	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R640	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R641	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R642	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R651	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R654	NRSA63J-390X	MG RESISTOR	39Ω 1/16W J	
R655	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R656	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R657	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R668	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R675	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R681	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R682	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R683	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R684	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R685	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R686	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R687	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R688	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R689	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R690	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R691	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	

L501	NQL114K-470X	INDUCTOR	47uH K
L502	NQL114K-470X	INDUCTOR	47uH K
L572	NQL114K-470X	INDUCTOR	47uH K
L621	NQL114K-470X	INDUCTOR	47uH K
L622	NQL114K-470X	INDUCTOR	47uH K
L623	NQL114K-470X	INDUCTOR	47uH K
L651	NQL114K-470X	INDUCTOR	47uH K
L652	NQL114K-470X	INDUCTOR	47uH K
L653	NQL114K-470X	INDUCTOR	47uH K

CN501	QGB2027L1-22X	CONNECTOR	B-B (1-22)
CN601	QGF0527F2-22W	CONNECTOR	FFC/FPC (1-22)
TH501	NAD0028-103X	N THERMISTOR	10kΩ
X501	NAX0385-001X	CRYSTAL	24.576MHz
X571	NAX0375-001X	CRYSTAL	16.9344MHz

Switch board (KD-G521)

Block No. [0][6]

△ Symbol No.	Part No.	Part Name	Description	Local
IC601	PT6523LQ-L	LCD DRIVER		
IC602	RPM7338-V4	RM.RECEIVER		
Q640	2SA1365/F-X	TRANSISTOR		
Q641	RT1N141C-X	DIGI TRANSISTOR		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
D601	SML-310VT/JK/-X	LED							G420J
D602	SML-310VT/JK/-X	LED							G521E
D603	SML-310VT/JK/-X	LED							G521EU
D604	SML-310VT/JK/-X	LED			R632	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	G521EX
D605	SML-310VT/JK/-X	LED							G524UI
D606	SML-310VT/JK/-X	LED							G525U
D607	SML-310VT/JK/-X	LED							G525UH
D608	SML-310VT/JK/-X	LED			R632	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	G525UN
D609	SML-310VT/JK/-X	LED			R633	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	G525UT
D610	SML-310VT/JK/-X	LED							AR470J
D611	SML-310VT/JK/-X	LED			R634	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	G527EE
D612	SML-310VT/JK/-X	LED							AR470J
D613	SML-310VT/JK/-X	LED							G527EE
D614	SML-310VT/JK/-X	LED			R634	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	G521E
D615	SML-310VT/JK/-X	LED							G521EU
D616	SML-310VT/JK/-X	LED			R634	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	G521EX
D617	SML-310VT/JK/-X	LED							G521EY
D618	SML-310VT/JK/-X	LED			R636	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	G420J
D619	SML-310VT/JK/-X	LED							G524UI
D640	MC2838-X	DIODE							G525U
D641	UDZW5.1B-X	SI DIODE			R636	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	G525UH
D642	1SS355W-X	DIODE C.M							G525UN
D643	UDZW6.2B-X	SI DIODE			R636	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	G525UT
D645	NSPW310BS/B2RST	LED		AR470J	R636	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	G527EE
				G420J					G521E
				G521E	R638	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	G521EU
				G521EX					G521EX
				G521EY					G521EY
D645	NSPW310BS/BRST/	WHITE LED		G524UI					AR470J
				G525U					G420J
				G525UH					G524UI
				G525UN	R638	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	G325U
				G525UT					G525UH
				G527EE					G525UN
D646	NSPW310BS/B2RST	LED		AR470J					G525UT
				G420J					G527EE
				G521E	R640	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	G521E
				G521EU					G521EU
				G521EX					G521EX
				G521EY					G521EY
D646	NSPW310BS/BRST/	WHITE LED		G524UI					AR470J
				G525U					G420J
				G525UH	R640	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	G524UI
				G525UN					G525U
				G525UT					G525UH
				G527EE					G525UN
C601	NCB31HK-223X	C CAPACITOR	0.022uF 50V K						G525UT
C602	NCS31HJ-681X	C CAPACITOR	680pF 50V J						G527EE
C603	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M		R641	NRSA02J-181X	MG RESISTOR	180Ω 1/10W J	G521E
C611	NCB31HK-123X	C CAPACITOR	0.012uF 50V K						G521EX
C612	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M						G521EY
					R641	NRSA02J-201X	MG RESISTOR	200Ω 1/10W J	G420J
R601	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J						G524UI
R602	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J						G525U
R603	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R641	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	G525UH
R604	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J						G525UN
R605	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J		R642	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	G525UT
R606	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J						AR470J
R607	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J						G527EE
R608	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J						G521E
R609	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J						G521EU
R610	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J		R642	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	G521EX
R611	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J						G521EY
R612	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J						AR470J
R613	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R643	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	G420J
R614	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J						G524UI
R620	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						G525U
R621	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R643	NRSA02J-201X	MG RESISTOR	200Ω 1/10W J	G525UH
									G525UN
R630	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R643	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	G525UT
				G420J					AR470J
				G524UI					G420J
				G525U	R644	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	G527EE
				G525UH					G521E
				G525UN					G521EU
				G525UT					G521EX
				AR470J					G521EY
				G521E					AR470J
				G521EU	R644	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	G420J
				G521EX					G524UI
				G521EY					G325U
				G527EE					G525UH
R631	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	AR470J					G525UN
				G527EE					G525UT
									G527EE
									G521E
									G521EU
									G521EX
									G521EY

△ Symbol No.	Part No.	Part Name	Description	Local
R646	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	AR470J G420J G524UI G525U G525UH G525UN G525UT G527EE
R648	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	G521E G521EU G521EX G521EY G420J G524UI G525U G525UH G525UN G525UT
R648	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	AR470J G527EE
R648	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R651	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R652	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R653	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R654	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R655	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R656	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R657	NRSA63J-513X	MG RESISTOR	51kΩ 1/16W J	
R658	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J	
R660	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	
R661	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	
R670	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R672	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R673	NRSA02J-473X	MG RESISTOR	47kΩ 1/10W J	
R674	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R691	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R692	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
CN601	NNZ0085-001	CAR CONNECTOR		
EN601	QSW1115-002	ROTARY ENCODER		
J601	QNS0245-001	AUX JACK		
S601	NSW0206-001X	TACT SWITCH		
S602	NSW0206-001X	TACT SWITCH		
S603	NSW0206-001X	TACT SWITCH		
S604	NSW0206-001X	TACT SWITCH		
S605	NSW0206-001X	TACT SWITCH		
S606	NSW0206-001X	TACT SWITCH		
S607	NSW0206-001X	TACT SWITCH		
S608	NSW0206-001X	TACT SWITCH		
S609	NSW0206-001X	TACT SWITCH		
S610	NSW0206-001X	TACT SWITCH		
S611	NSW0206-001X	TACT SWITCH		
S612	NSW0206-001X	TACT SWITCH		
S613	NSW0206-001X	TACT SWITCH		
S614	NSW0206-001X	TACT SWITCH		
S616	NSW0206-001X	TACT SWITCH		
S617	NSW0206-001X	TACT SWITCH		

Switch board (KD-G527)

Block No. [0][7]

△ Symbol No.	Part No.	Part Name	Description	Local
IC601	PT6523LQ-L	LCD DRIVER		
IC602	RPM7338-V4	RM.RECEIVER		
Q640	2SA1365/F/-X	TRANSISTOR		
Q641	RT1N141C-X	DIGI TRANSISTOR		
D601	SML-310VT/JK/-X	LED		
D602	SML-310VT/JK/-X	LED		
D603	SML-310VT/JK/-X	LED		
D604	SML-310VT/JK/-X	LED		
D605	SML-310VT/JK/-X	LED		
D606	SML-310VT/JK/-X	LED		
D607	SML-310VT/JK/-X	LED		
D608	SML-310VT/JK/-X	LED		
D609	SML-310VT/JK/-X	LED		
D610	SML-310VT/JK/-X	LED		
D611	SML-310VT/JK/-X	LED		
D612	SML-310VT/JK/-X	LED		
D613	SML-310VT/JK/-X	LED		

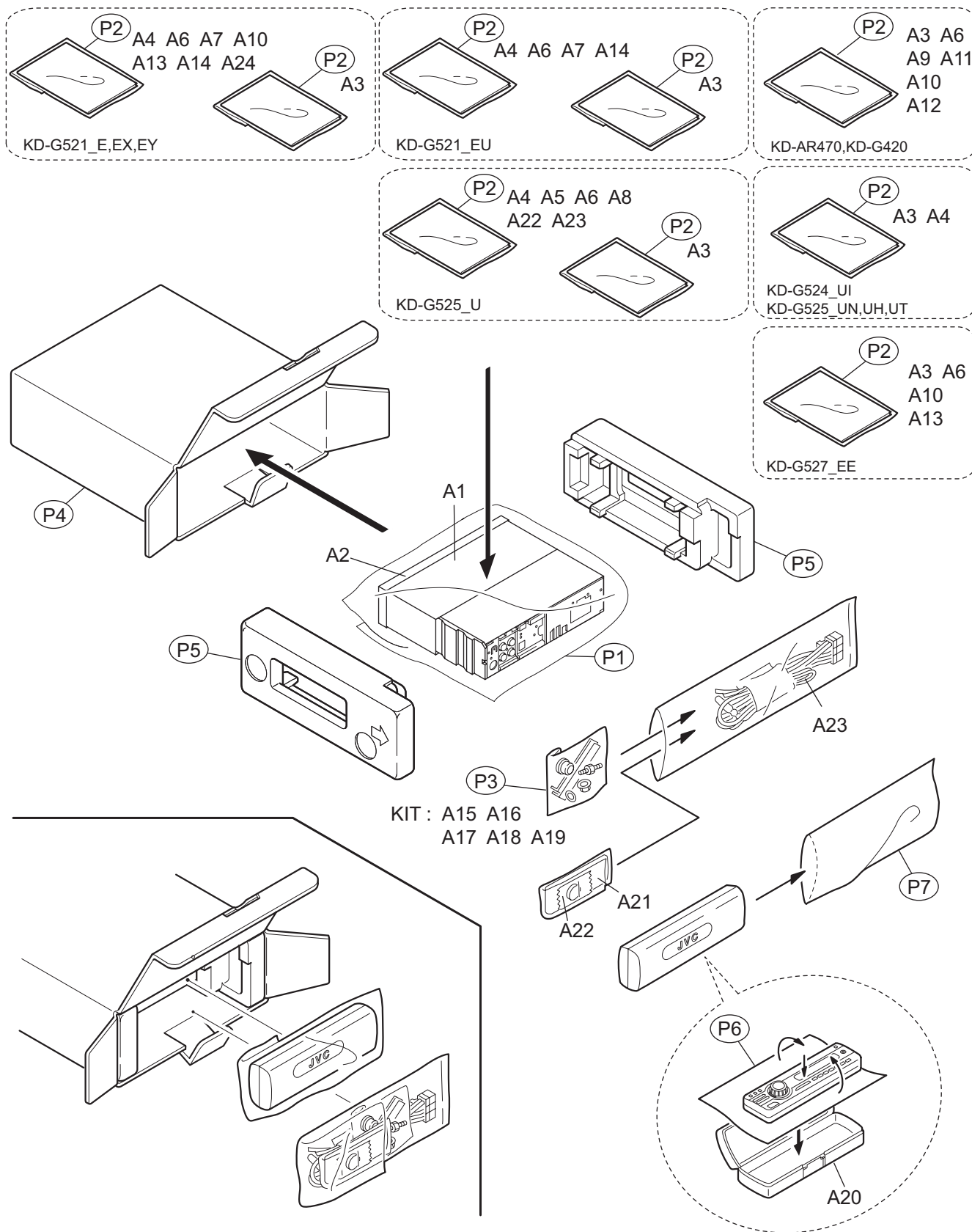
△ Symbol No.	Part No.	Part Name	Description	Local
D614	SML-310VT/JK/-X	LED		
D615	SML-310VT/JK/-X	LED		
D616	SML-310VT/JK/-X	LED		
D617	SML-310VT/JK/-X	LED		
D618	SML-310VT/JK/-X	LED		
D619	SML-310VT/JK/-X	LED		
D640	MC2838-X	DIODE		
D641	UDZW5.1B-X	SI DIODE		
D642	1SS355W-X	DIODE C.M		
D643	UDZW6.2B-X	SI DIODE		
D645	NSPW310BS/B2RST	LED		AR470J G420J G521E G521EU G521EX G521EY G524UI G525U G525UH G525UN G525UT G527EE
D645	NSPW310BS/BRST/	WHITE LED		
D646	NSPW310BS/B2RST	LED		AR470J G420J G521E G521EU G521EX G521EY G524UI G525U G525UH G525UN G525UT G527EE
D646	NSPW310BS/BRST/	WHITE LED		
C601	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C602	NCS31HJ-681X	C CAPACITOR	680pF 50V J	
C603	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C611	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	
C612	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
R601	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R602	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R603	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R604	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R605	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R606	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R607	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R608	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R609	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R610	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R611	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R612	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R613	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R614	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R620	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R621	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R630	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	G420J G524UI G525U G525UH G525UN G525UT AR470J G527EE
R630	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	G521E G521EU G521EX G521EY G527EE
R631	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	AR470J G527EE
R632	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	G420J G521E G521EU G521EX G521EY G524UI G525U G525UH G525UN G525UT AR470J G527EE
R632	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	G521E G521EU G521EX G521EY
R633	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	G420J G524UI G525U G525UH G525UN G525UT AR470J G527EE
R634	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	G521E G521EU G521EX G521EY
R634	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	G420J G524UI G525U G525UH G525UN G525UT AR470J G527EE
R634	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	G521E G521EU G521EX
R636	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	G521E G521EU G521EX

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R636	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	G420J G524UI G525U G525UH G525UN G525UT	R660	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	
R636	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	AR470J G527EE	R661	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	
R638	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	G521E G521EU G521EX G521EY	R670	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R638	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	AR470J G420J G524UI G525U G525UH G525UN G525UT G527EE	R672	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R640	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	G521E G521EU G521EX G521EY	R673	NRSA02J-473X	MG RESISTOR	47kΩ 1/10W J	
R640	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	AR470J G420J G524UI G525U G525UH G525UN G525UT G527EE	R674	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R641	NRSA02J-181X	MG RESISTOR	180Ω 1/10W J	G521E G521EU G521EX G521EY	R691	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R641	NRSA02J-201X	MG RESISTOR	200Ω 1/10W J	G420J G524UI G525U G525UH G525UN G525UT	R692	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R641	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	AR470J G527EE	CN601	NNZ0085-001	CAR CONNECTOR		
R642	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	G521E G521EU G521EX G521EY	EN601	QSW1115-002	ROTARY ENCODER		
R642	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	AR470J G420J G524UI G525U G525UH G525UN G525UT G527EE	J601	QNS0245-001	AUX JACK		
R643	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	G521E G521EU G521EX G521EY	S601	NSW0206-001X	TACT SWITCH		
R643	NRSA02J-201X	MG RESISTOR	200Ω 1/10W J	G524UI G525U G525UH G525UN G525UT	S602	NSW0206-001X	TACT SWITCH		
R643	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	AR470J G420J G527EE	S603	NSW0206-001X	TACT SWITCH		
R644	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	G521E G521EU G521EX G521EY	S604	NSW0206-001X	TACT SWITCH		
R644	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	AR470J G420J G524UI G525U G525UH G525UN G525UT G527EE	S605	NSW0206-001X	TACT SWITCH		
R646	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	G521E G521EU G521EX G521EY	S606	NSW0206-001X	TACT SWITCH		
R646	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	AR470J G420J G524UI G525U G525UH G525UN G525UT G527EE	S607	NSW0206-001X	TACT SWITCH		
R648	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	G521E G521EU G521EX G521EY	S608	NSW0206-001X	TACT SWITCH		
R648	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	AR470J G420J G524UI G525U G525UH G525UN G525UT G527EE	S609	NSW0206-001X	TACT SWITCH		
R648	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	G521E G521EU G521EX G521EY	S610	NSW0206-001X	TACT SWITCH		
R651	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	G420J G524UI G525U G525UH G525UN G525UT	S611	NSW0206-001X	TACT SWITCH		
R652	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	AR470J G527EE	S612	NSW0206-001X	TACT SWITCH		
R653	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	G521E G521EU G521EX G521EY	S613	NSW0206-001X	TACT SWITCH		
R654	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	G420J G524UI G525U G525UH G525UN G525UT	S614	NSW0206-001X	TACT SWITCH		
R655	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	AR470J G527EE	S616	NSW0206-001X	TACT SWITCH		
R656	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		S617	NSW0206-001X	TACT SWITCH		
R657	NRSA63J-513X	MG RESISTOR	51kΩ 1/16W J						
R658	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J						

Packing materials and accessories parts list

Block No. M 3 M M

No additional / supplemental order of WARRANTY CARDS are available.



Packing and Accessories

Block No. [M][3][M][M]

△	Symbol No.	Part No.	Part Name	Description	Local
	A 1	GE20137-003A	MOUNTING SLEEVE		
	A 2	GE20149-013A	TRIM PLATE		G420J, G521E, G521EU, G521EX, G521EY
	A 2	GE20149-014A	TRIM PLATE		G524UI, G525U, G525UH, G525UN, G525UT
	A 2	GE20149-010A	TRIM PLATE		AR470J, G527EE
	A 3	GET0336-001A	INST BOOK	ENG SPA FRE	AR470J, G420J
	A 3	GET0339-001A	INST BOOK	GER FRE ITA	G521E
	A 3	GET0339-003A	INST BOOK	ENG FRE	G521EU, G521EX
	A 3	GET0339-006A	INST BOOK	ENG GER RUS	G521EY
	A 3	GET0338-001A	INST BOOK	ENG	G524UI
	A 3	GET0337-001A	INST BOOK	ENG THA	G525U, G525UH
	A 3	GET0337-004A	INST BOOK	ENG INA	G525UN
	A 3	GET0337-005A	INST BOOK	ENG CHI(TAIWAN)	G525UT
	A 3	GET0340-001A	INST BOOK	EMG RUS	G527EE
	A 4	GET0339-002A	INST BOOK	SPA GRE POR	G521E
	A 4	GET0339-005A	INST BOOK	SPA TUR PER	G521EU
	A 4	GET0339-004A	INST BOOK	DUT SWE DAN FIN	G521EX
	A 4	GET0339-007A	INST BOOK	POL CZE HUN	G521EY
	A 4	GET0337-002A	INST BOOK	KOR CHI(TAIWAN) ARA PER	G525U
	A 5	GET0337-003A	INST BOOK	RUS	G525U
	A 6	GET0336-002A	INSTALL MANUAL		AR470J, G420J
	A 6	GET0339-008A	INSTALL MANUAL		G521E
	A 6	GET0339-010A	INSTALL MANUAL		G521EU, G521EX
	A 6	GET0339-013A	INSTALL MANUAL		G521EY
	A 6	GET0338-002B	INSTALL MANUAL		G524UI
	A 6	GET0337-006A	INSTALL MANUAL		G525U, G525UH
	A 6	GET0337-009A	INSTALL MANUAL		G525UN
	A 6	GET0337-010A	INSTALL MANUAL		G525UT
	A 6	GET0340-002A	INSTALL MANUAL		G527EE
	A 7	GET0339-009A	INSTALL MANUAL		G521E
	A 7	GET0339-012A	INSTALL MANUAL		G521EU
	A 7	GET0339-011A	INSTALL MANUAL		G521EX
	A 7	GET0339-014A	INSTALL MANUAL		G521EY
	A 7	GET0337-007A	INSTALL MANUAL		G525U
	A 8	GET0337-008A	INSTALL MANUAL		G525U
	A 9	LVT0717-001B	TROUBLE SHEET(C		AR470J, G420J
	A 10	-----	WARRANTY CARD	BT-52006-2	AR470J, G420J
	A 10	-----	WARRANTY CARD	BT-54027-1	G521E, G521EX, G521EY, G527EE
	A 11	-----	WARRANTY CARD	BT-51029-2	AR470J
	A 11	-----	WARRANTY CARD	BT-51018-4	G420J
	A 12	BT-51034-2	REGISTRATION CARD		AR470J, G420J
	A 13	VND3046-001	SERIAL TICKET		G521E, G521EX, G521EY
	A 14	LVT1435-001A	WEEE SHEET		G521E, G521EU, G521EX, G521EY
	A 15	VKZ4027-202	PLUG NUT		
	A 16	VKH4871-003	MOUNT BOLT		
	A 17	VKZ4328-003	LOCK NUT		
	A 18	QYWWS53A008ZA	WASHER	0mm/5.3mm x	
	A 19	GE40130-002A	HOOK	(x2)	
	A 20	FSJB3002-30C	HARD CASE		
	A 21	RM-RK50C	REMOCON		AR470J, G521E, G521EU, G521EX, G521EY, G524UI, G525U, G525UH, G525UN, G525UT, G527EE
	A 22	-----	BATTERY		AR470J, G521E, G521EU, G521EX, G521EY, G524UI, G525U, G525UH, G525UN, G525UT, G527EE
	A 23	QAM0675-001	16P CORD ASSY		AR470J
	A 23	QAM0306-002	16P CORD ASSY		G420J
	A 23	QAM0456-002	16P CORD ASSY		G524UI, G525U, G525UH, G525UN, G525UT
△	A 23	QAM0176-002	POWER CORD		G521E, G521EU, G521EX, G521EY, G527EE
	A 24	VND3050-002	IDENTITY CARD		G521E, G521EX, G521EY
	KIT	SRW-385U	SCREW PART KIT	A15 A16 A17 A18 A19	
	P 1	QPC03004315P	POLY BAG	30cm x 43cm	
	P 2	FSPG4002-001	POLY BAG	(x2)	G521E, G521EU, G521EX, G521EY, G525U
	P 2	FSPG4002-001	POLY BAG		AR470J, G420J, G524UI, G525UH, G525UN, G525UT, G527EE
	P 3	QPA00801205	POLY BAG	8cm x 12cm	
	P 4	GE31889-002A	CARTON		AR470J
	P 4	GE31892-002A	CARTON		G420J
	P 4	GE31900-002A	CARTON		G521E, G521EU, G521EX, G521EY
	P 4	GE32039-002A	CARTON		G524UI
	P 4	GE31897-002A	CARTON		G525U, G525UH, G525UN, G525UT
	P 4	GE31903-001A	CARTON		G527EE
	P 5	GE10070-003A	EPS CUSHION		
	P 6	FSYH4036-068	SHEET		
	P 7	QPA01003003	POLY BAG	10cm x 30cm	